JP2000-2922860

FIG.1

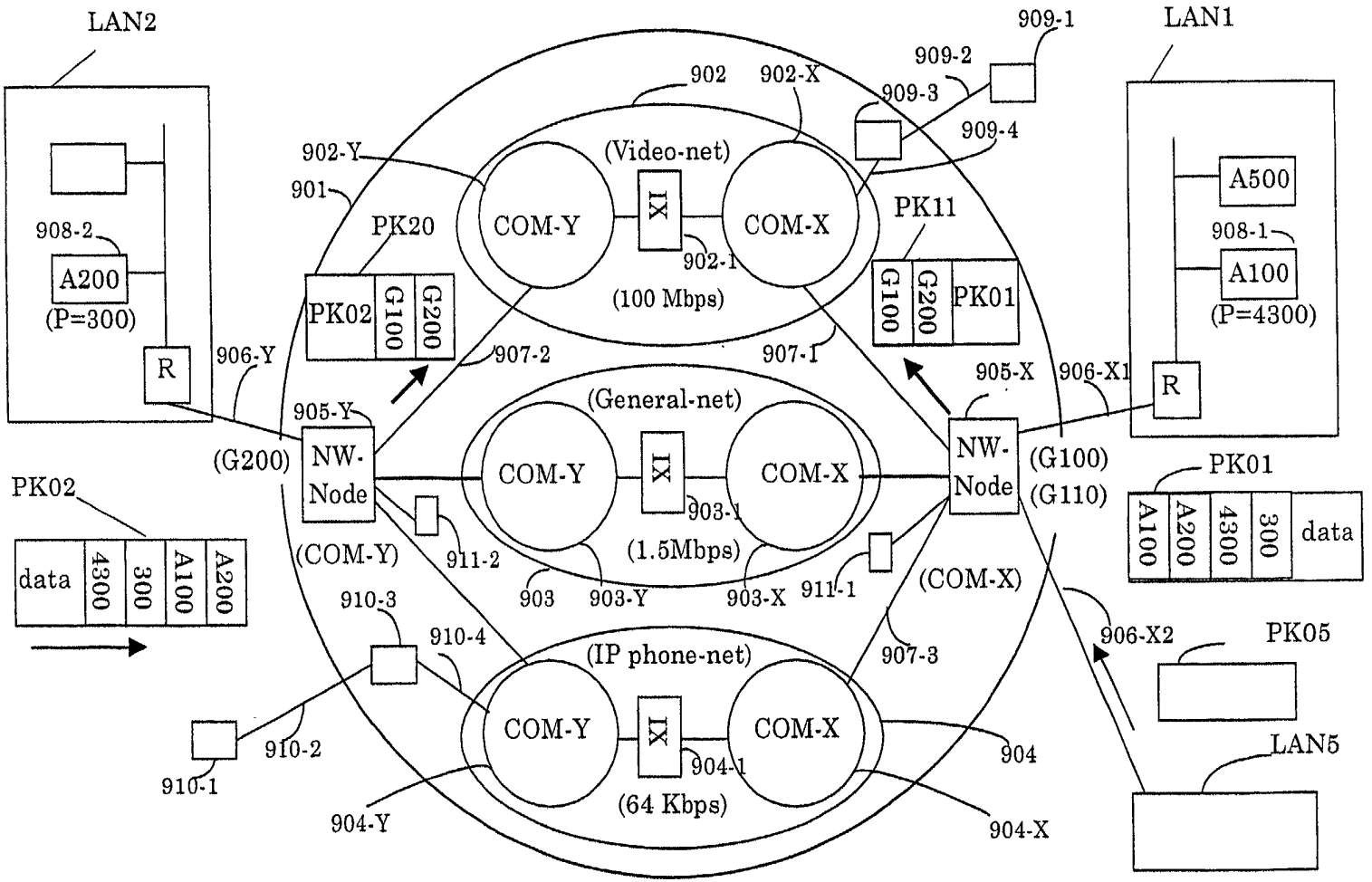


FIG.2

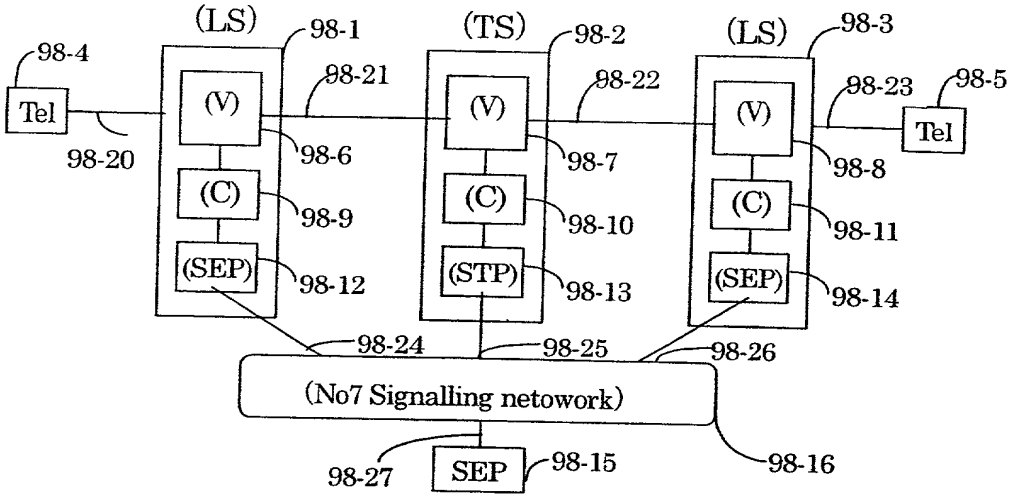
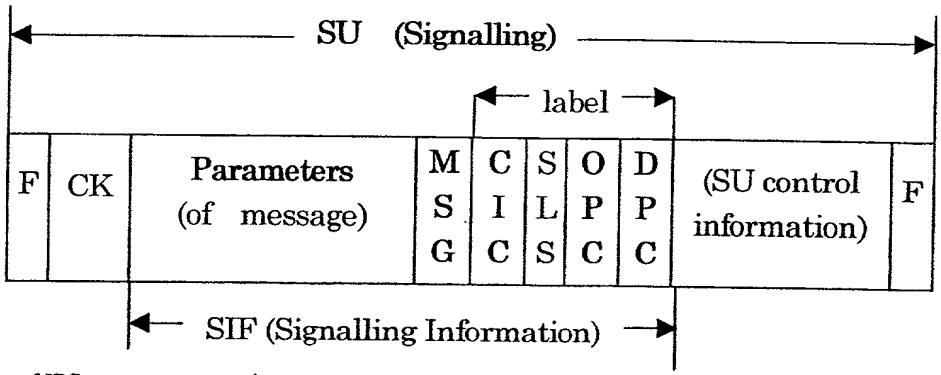

(LS)
98-1
(TS)
98-2
(LS)
98-3
98-4
98-21
98-22
98-23
98-5
Tel
(V)
(V)
(V)
Tel
98-20
98-6
98-7
98-8
(C)
(C)
(C)
98-9
98-10
98-11
(SEP)
(STP)
(SEP)
98-12
98-13
98-14
98-24
98-25
98-26
(No7 Signalling netowork)
98-16
98-27
SEP
98-15

FIG.3



MSG: message (IAM, ACM, CPG, ANM, REL, RLC, SUS, RES, CON, etc.)
OPC : origin point code DPC : destination point code
CIC: circuit identification code
SLS= Signalling Link Selection
F: flag (01111110) CK: check code

FIG.4

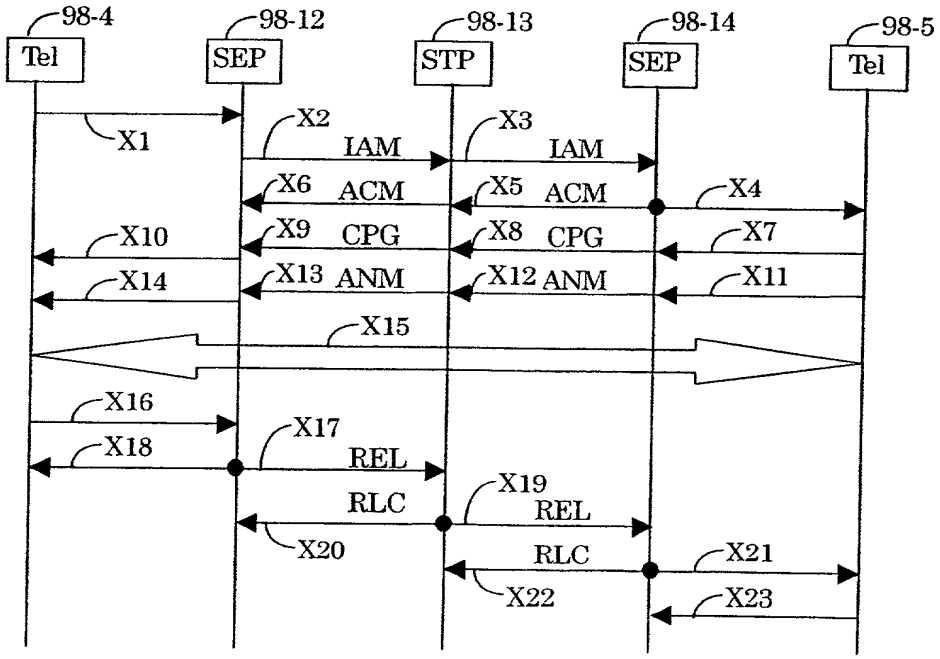


FIG.5

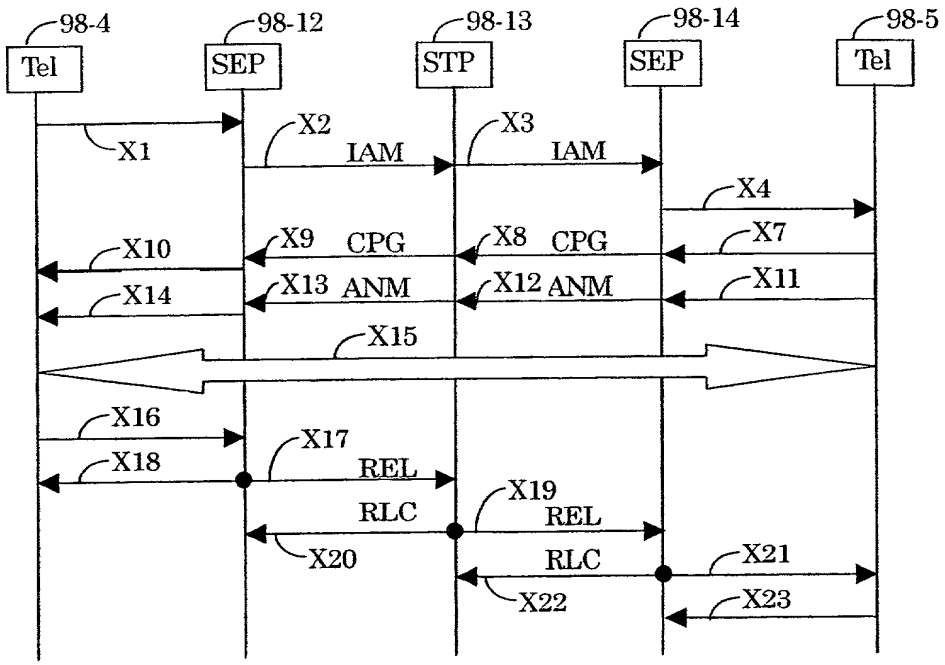

98-4
Tel
98-12
SEP
98-13
STP
98-14
SEP
98-5
Tel
X1
X2
IAM
X3
IAM
X4
X10
X9
CPG
X8
CPG
X7
X14
X13
ANM
X12
ANM
X11
X15
X16
X18
X17
REL
X19
RLC
REL
X20
RLC
X21
X22
X23

FIG.6

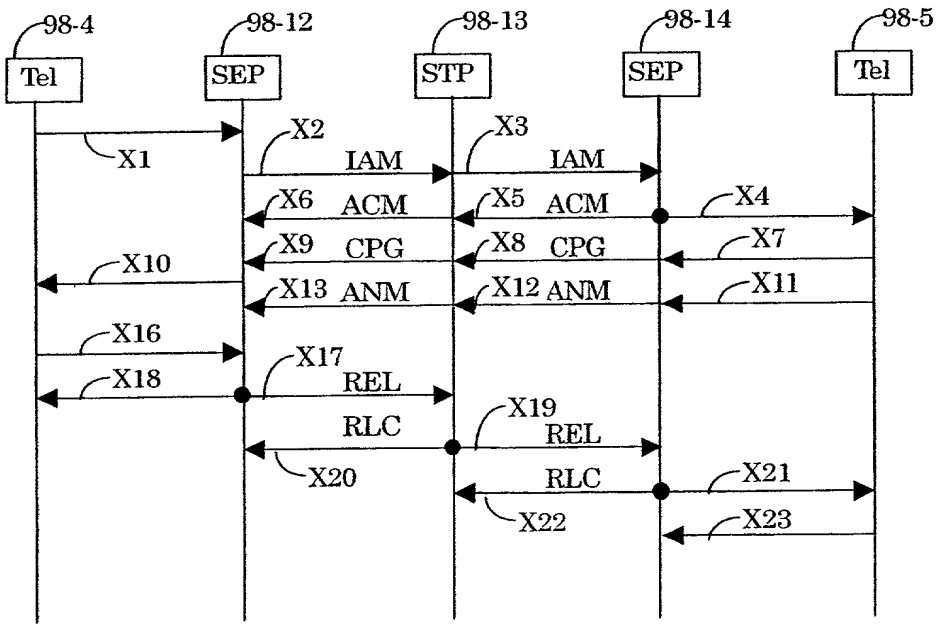

98-4
Tel
98-12
SEP
98-13
STP
98-14
SEP
98-5
Tel
X1
X2
IAM
X3
IAM
X6
ACM
X5
ACM
X4
X9
CPG
X8
CPG
X7
X10
X13
ANM
X12
ANM
X11
X16
X18
X17
REL
X19
RLC
REL
X20
RLC
X21
X22
X23

FIG.7

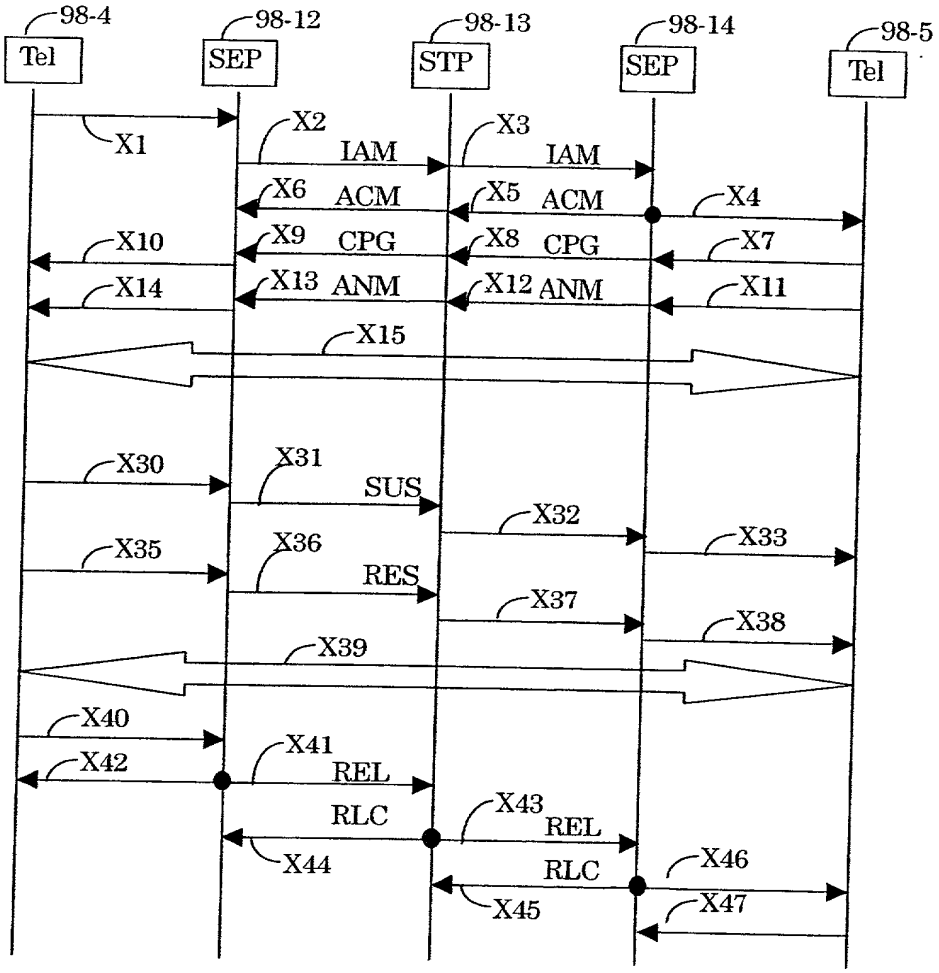

98-4
Tel
98-12
SEP
98-13
STP
98-14
SEP
98-5
Tel
X1
X2
IAM
X3
IAM
X6
ACM
X5
ACM
X4
X10
X9
CPG
X8
CPG
X7
X14
X13
ANM
X12
ANM
X11
X15
X30
X31
SUS
X32
X33
X35
X36
RES
X37
X38
X39
X40
X41
X42
REL
RLC
X43
REL
X44
RLC
X46
X45
X47

FIG.8

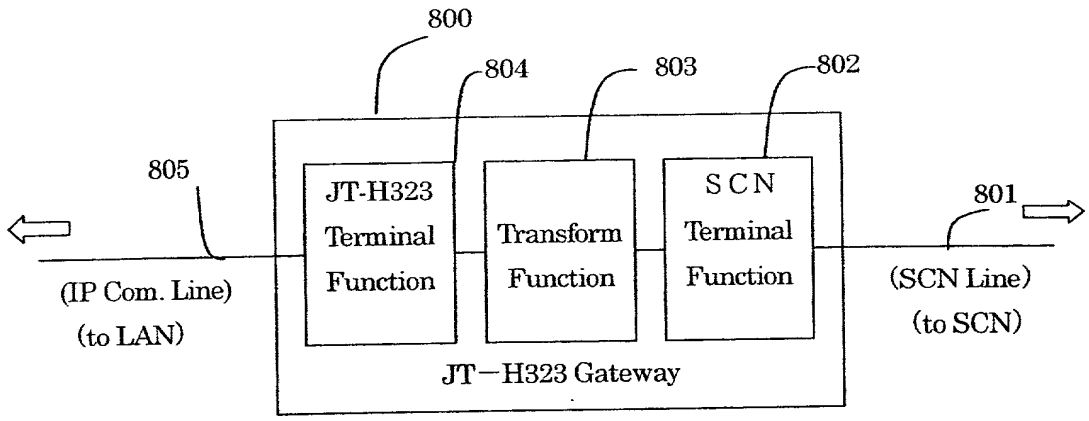


FIG.9

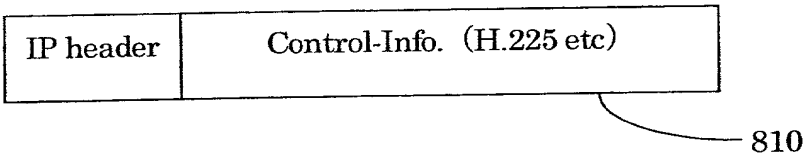


FIG.10

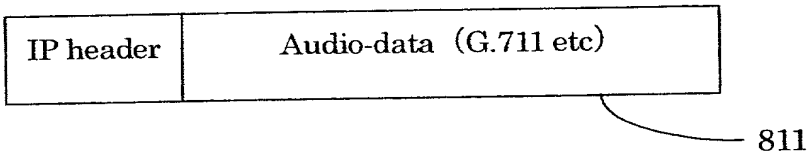


FIG.11

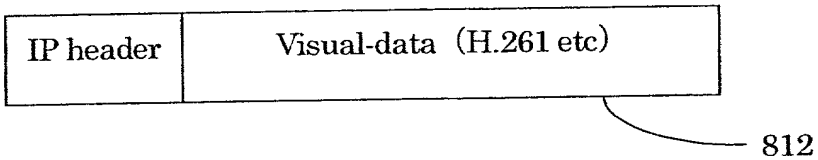


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FIG.12

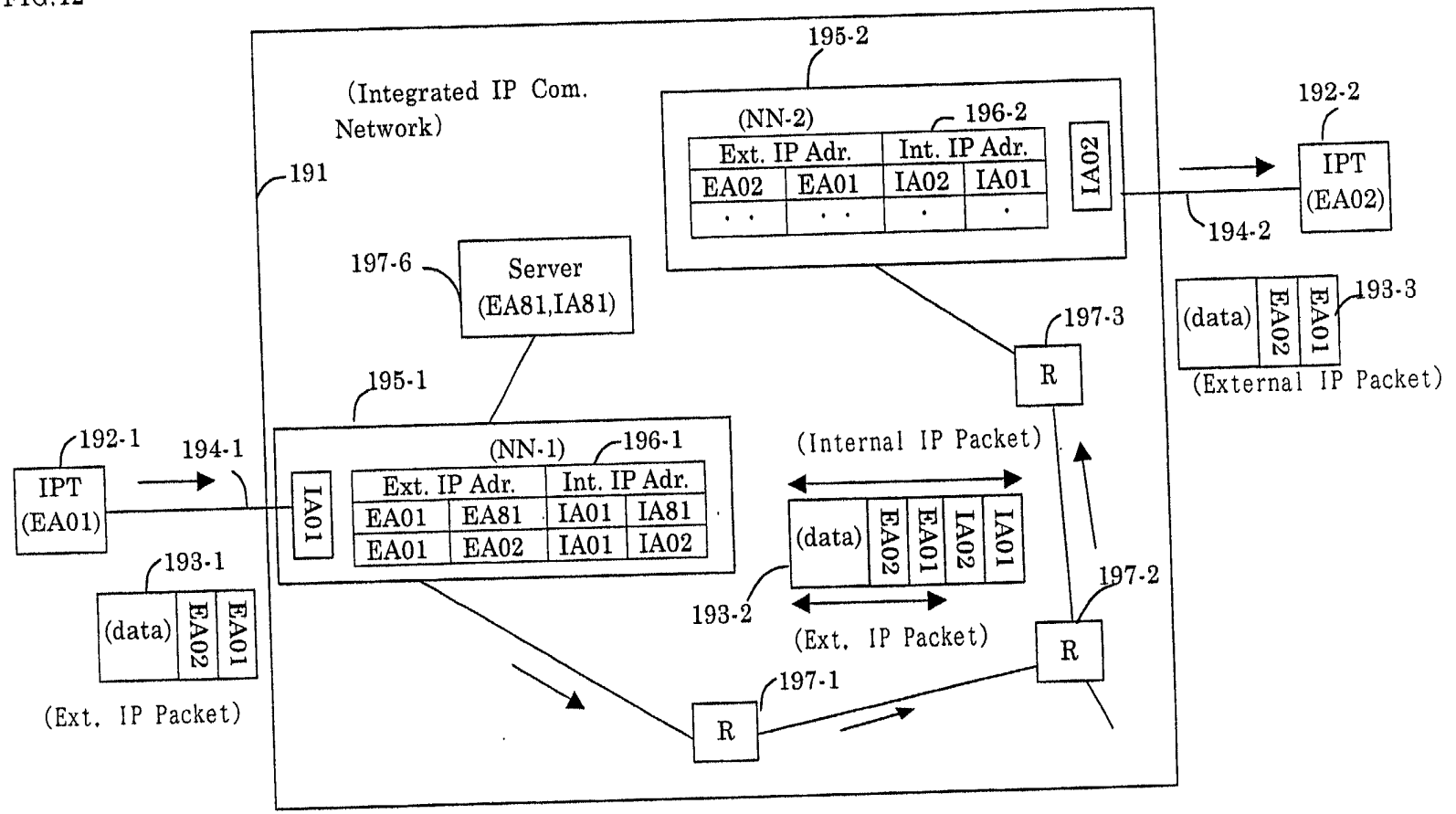


FIG.13

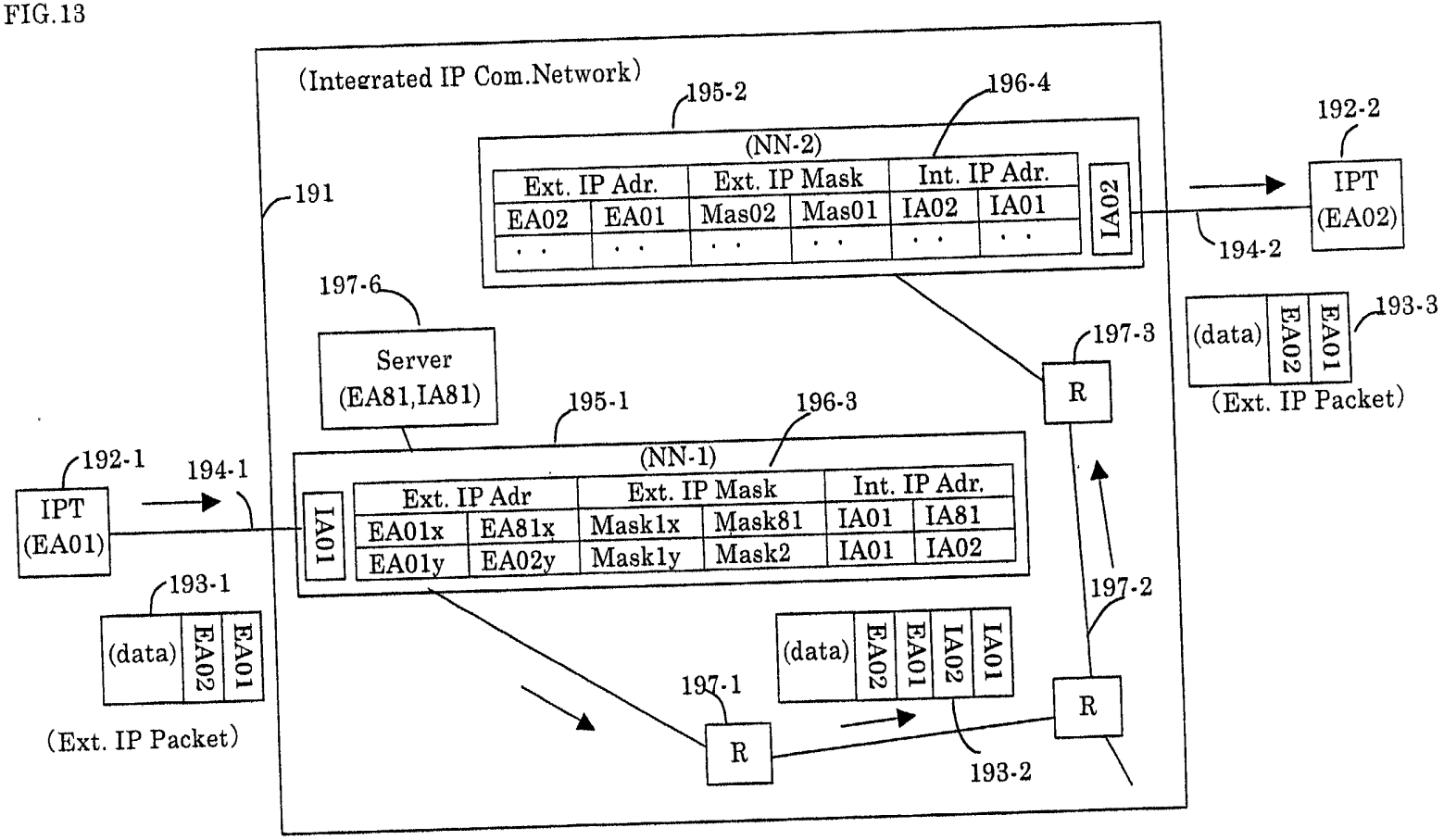

(Integrated IP Com.Network)
191
195-2
196-4
(NN-2)
Ext. IP Adr.
Ext. IP Mask
Int. IP Adr.
EA02
EA01
Mas02
Mas01
IA02
IA01
IA02
192-2
IPT
(EA02)
194-2
197-6
Server
(EA81,IA81)
197-3
R
(data)
EA02
EA01
193-3
(Ext. IP Packet)
195-1
196-3
(NN-1)
192-1
194-1
IPT
(EA01)
IA01
Ext. IP Adr
Ext. IP Mask
Int. IP Adr.
EA01x
EA81x
Mask1x
Mask81
IA01
IA81
EA01y
EA02y
Mask1y
Mask2
IA01
IA02
193-1
(data)
EA02
EA01
(Ext. IP Packet)
197-2
(data)
EA02
EA01
IA02
IA01
197-1
R
R
193-2

FIG.14

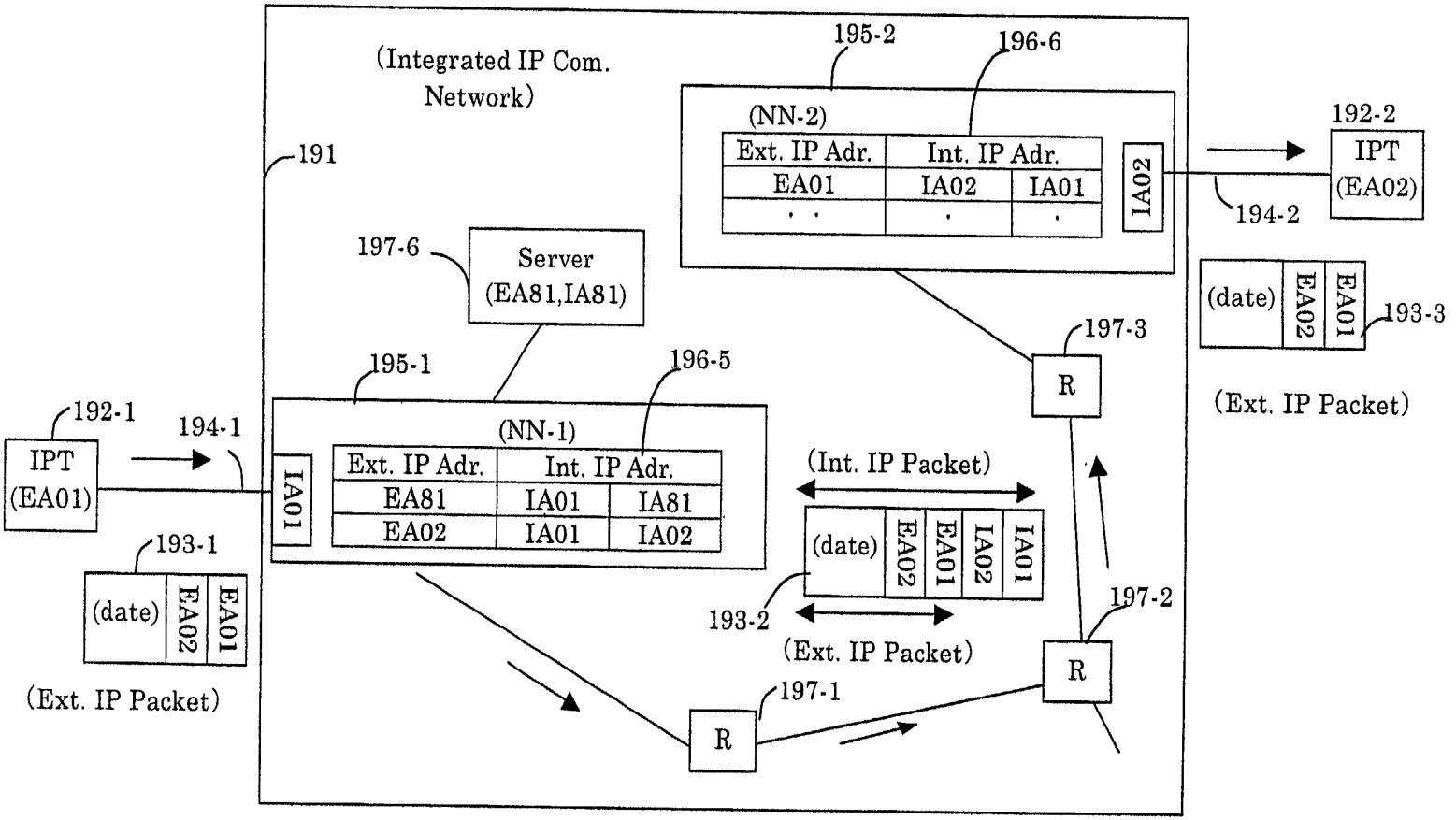

(Integrated IP Com. Network)
191
195-2
196-6
(NN-2)
Ext. IP Adr.
Int. IP Adr.
EA01
IA02
IA01
IA02
192-2
IPT
(EA02)
194-2
197-6
Server
(EA81,IA81)
(date)
EA02
EA01
193-3
(Ext. IP Packet)
197-3
R
195-1
196-5
192-1
194-1
IPT
(EA01)
(NN-1)
Ext. IP Adr.
Int. IP Adr.
EA81
IA01
IA81
EA02
IA01
IA02
IA01
(Int. IP Packet)
(date)
EA02
EA01
IA02
IA01
193-1
(date)
EA02
EA01
193-2
(Ext. IP Packet)
(Ext. IP Packet)
197-2
R
197-1
R

FIG.15

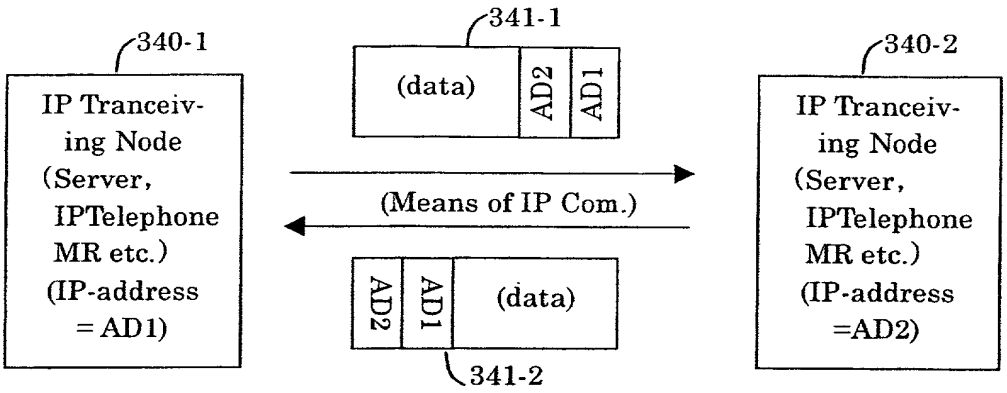

340-1
IP Tranceiv-
ing Node
(Server,
IPTelephone
MR etc.)
(IP-address
= AD1)
341-1
(data)
AD2
AD1
(Means of IP Com.)
AD2
AD1
(data)
341-2
340-2
IP Tranceiv-
ing Node
(Server,
IPTelephone
MR etc.)
(IP-address
=AD2)

FIG.16

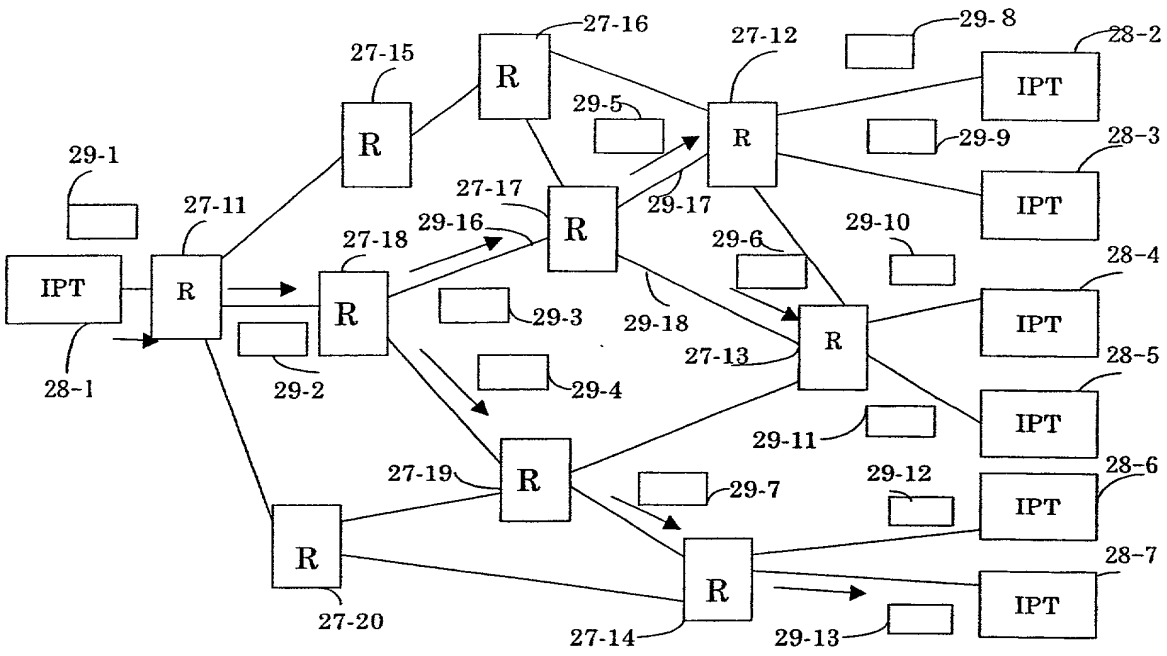

27-16
27-15
27-12
29-8
28-2
R
R
R
IPT
29-5
29-1
29-9
28-3
27-11
27-17
29-16
29-17
IPT
27-18
R
R
29-6
29-10
IPT
28-4
29-3
29-18
27-13
28-1
29-2
29-4
28-5
29-11
IPT
27-19
R
29-7
29-12
28-6
IPT
R
R
28-7
IPT
27-20
27-14
29-13

FIG.17

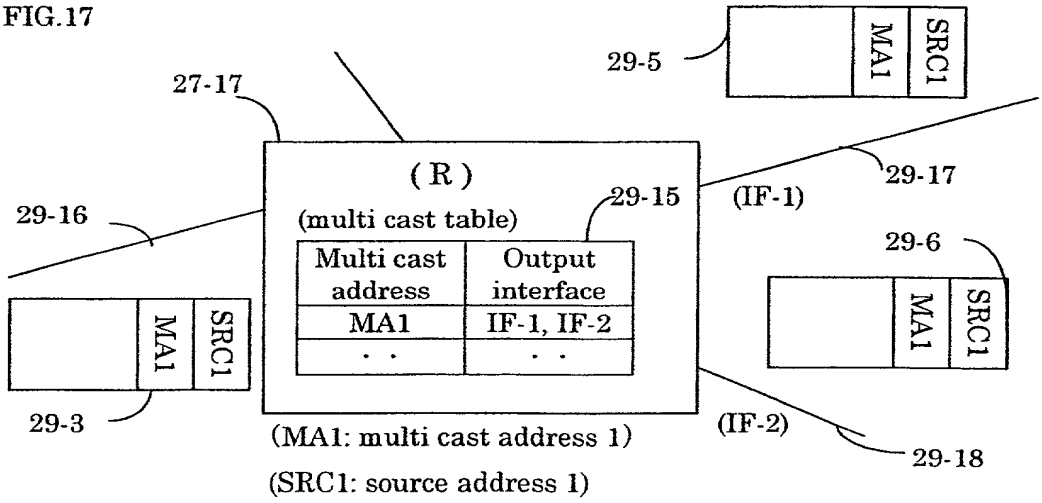

29-5
MA1
SRC1
27-17
(R)
29-15
29-16
(multi cast table)
(IF-1)
29-17
Multi cast address
Output interface
MA1
IF-1, IF-2
29-6
MA1
SRC1
MA1
SRC1
29-3
(IF-2)
29-18
(MA1: multi cast address 1)
(SRC1: source address 1)

FIG.18

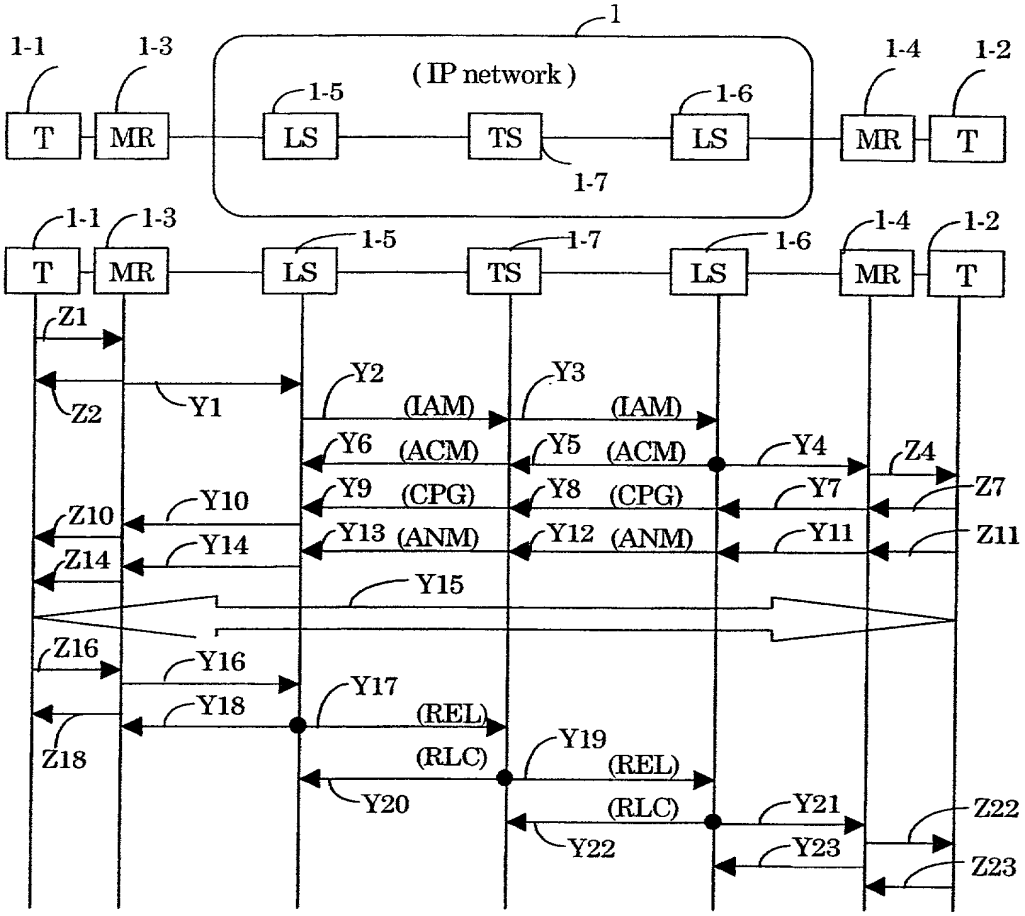
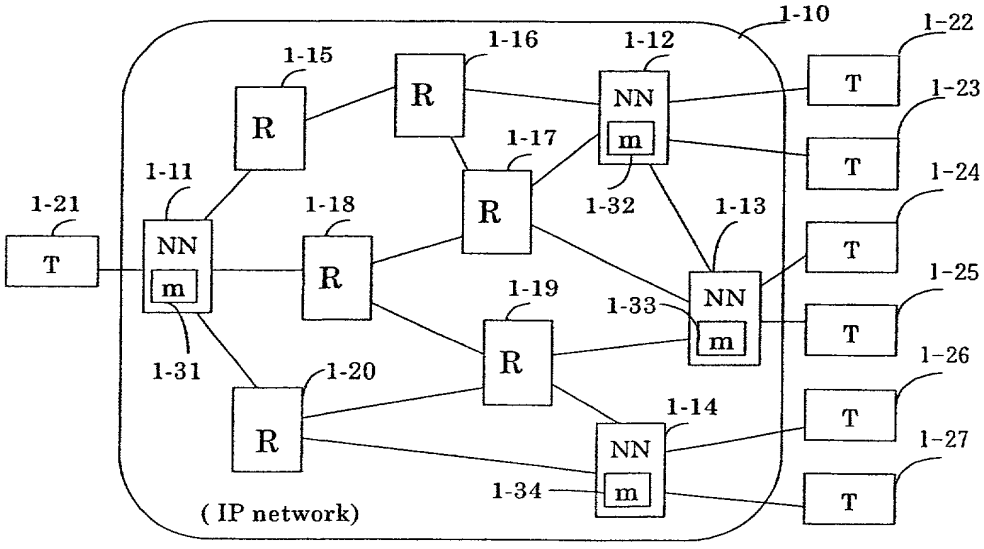


FIG.19



(m: address registration)

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FIG.20

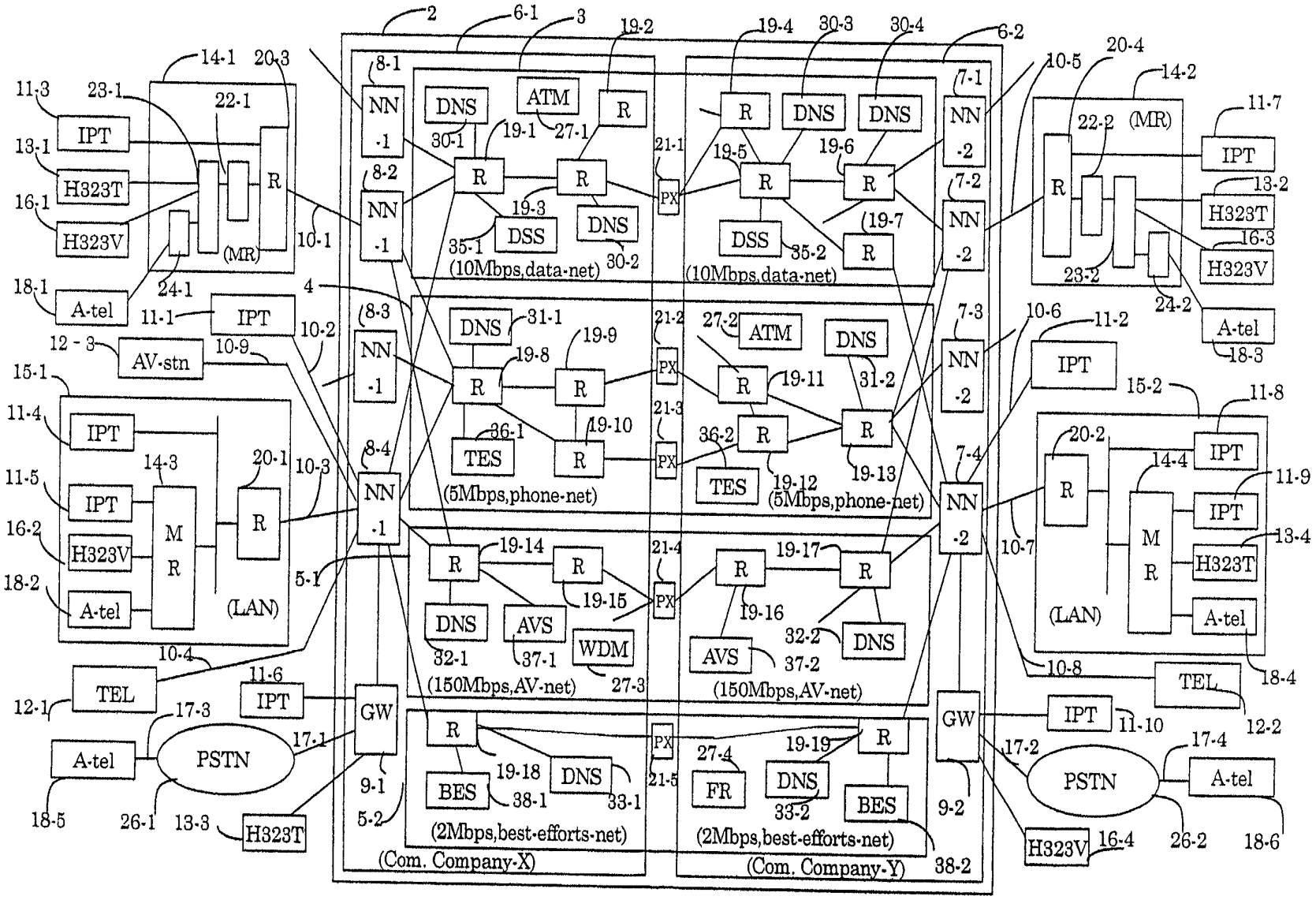


FIG.21

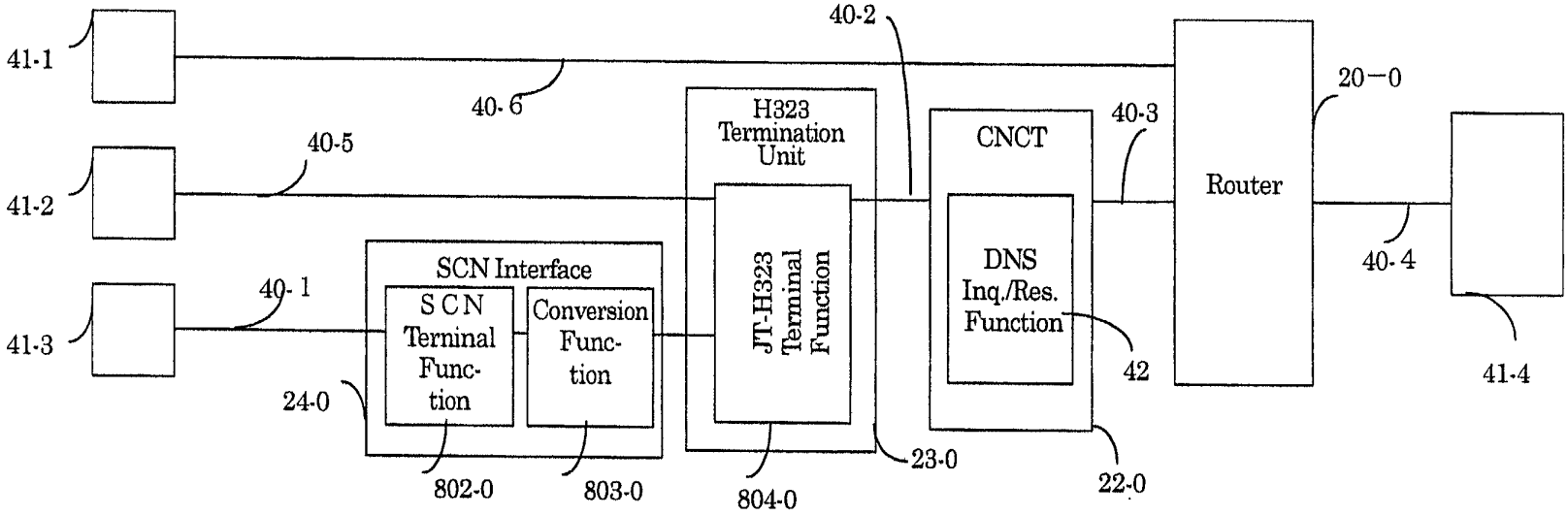


FIG.22

IP Header	DNS Format Header Sec./Inq./Res. Sec./Answer Sec./Authority Sec./Addtional Information Sec

43

FIG.23

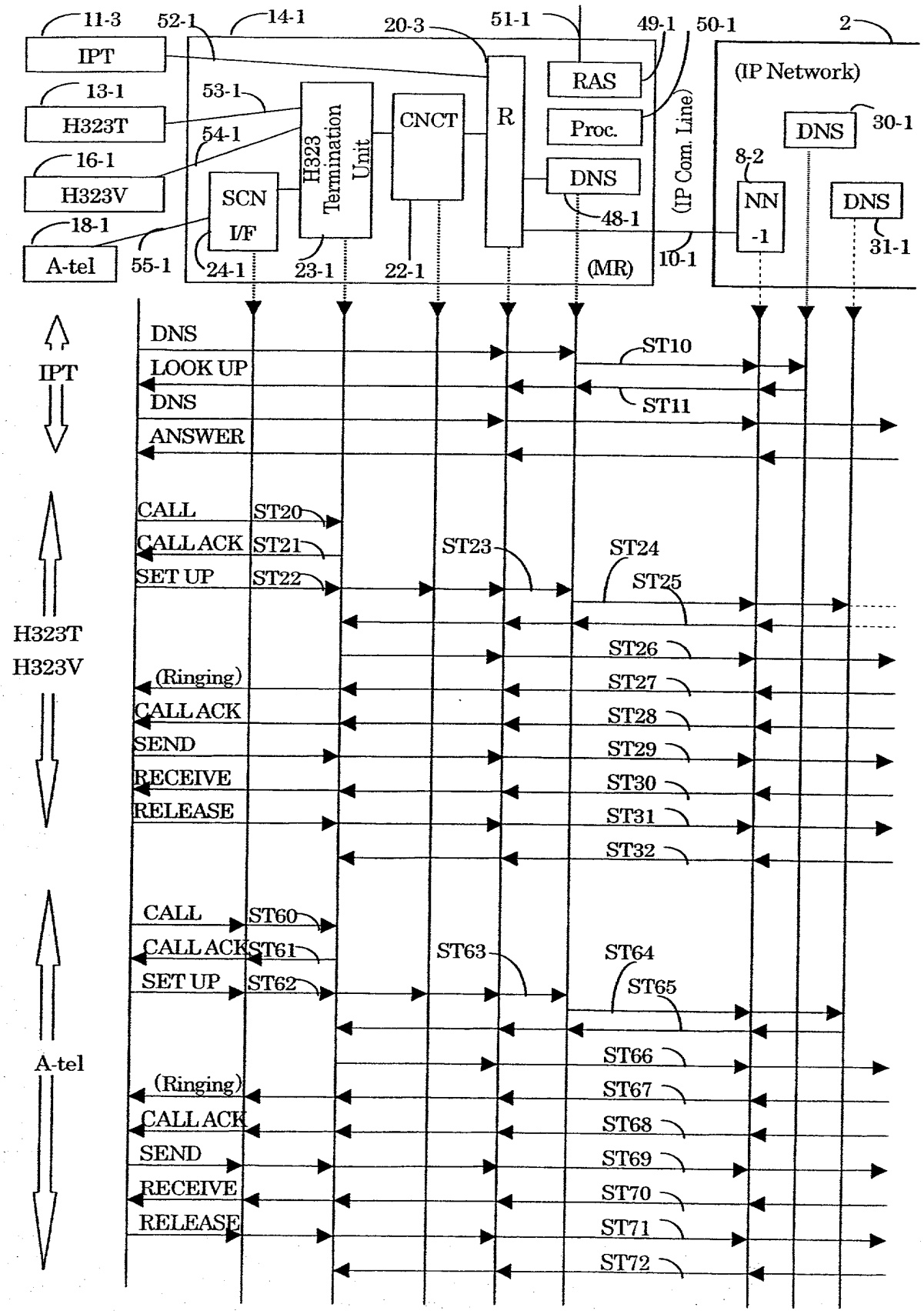

11-3
52-1
14-1
20-3
51-1
49-1
50-1
2
IPT
13-1
53-1
H323T
54-1
16-1
H323V
18-1
A-tel
55-1
SCN I/F
24-1
H323 Termination Unit
23-1
CNCT
22-1
R
RAS
Proc.
DNS
48-1
(MR)
(IP Com. Line)
10-1
(IP Network)
DNS
30-1
8-2
NN -1
DNS
31-1
IPT
DNS
LOOK UP
DNS
ANSWER
ST10
ST11
H323T
H323V
CALL
ST20
CALL ACK
ST21
SET UP
ST22
ST23
ST24
ST25
ST26
(Ringing)
ST27
CALL ACK
ST28
SEND
ST29
RECEIVE
ST30
RELEASE
ST31
ST32
A-tel
CALL
ST60
CALL ACK
ST61
SET UP
ST62
ST63
ST64
ST65
ST66
(Ringing)
ST67
CALL ACK
ST68
SEND
ST69
RECEIVE
ST70
RELEASE
ST71
ST72

FIG.24

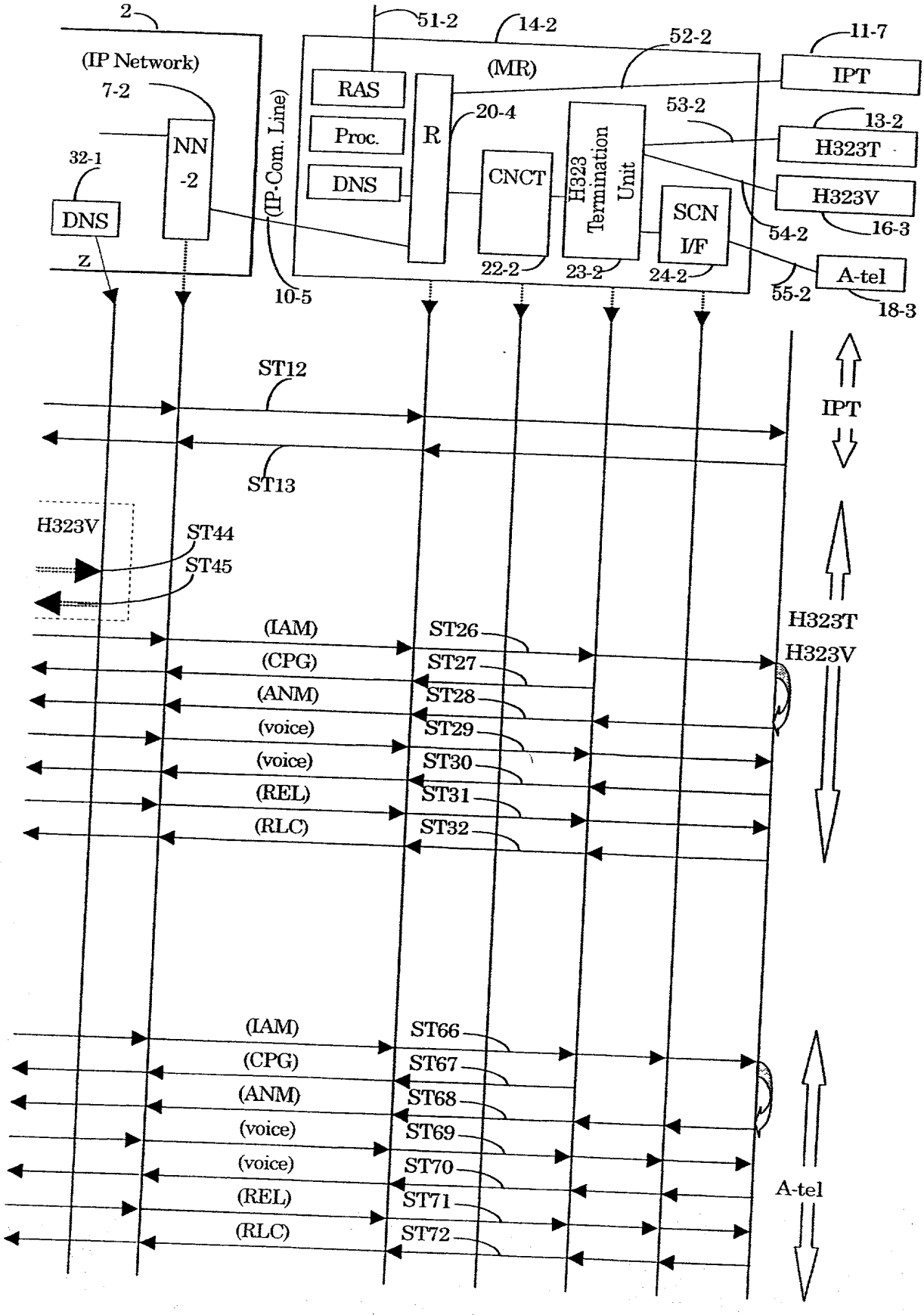

2
(IP Network)
7-2
NN
-2
32-1
DNS
z
(IP-Com. Line)
10-5
51-2
14-2
(MR)
RAS
Proc.
DNS
R
20-4
CNCT
22-2
H323 Termination Unit
23-2
SCN I/F
24-2
52-2
53-2
54-2
55-2
11-7
IPT
13-2
H323T
H323V
16-3
A-tel
18-3
ST12
ST13
IPT
H323V
ST44
ST45
(IAM)
(CPG)
(ANM)
(voice)
(voice)
(REL)
(RLC)
ST26
ST27
ST28
ST29
ST30
ST31
ST32
H323T
H323V
(IAM)
(CPG)
(ANM)
(voice)
(voice)
(REL)
(RLC)
ST66
ST67
ST68
ST69
ST70
ST71
ST72
A-tel

FIG.25

44−1

External IP Address	Communication Line Identification Symbol
A481	Line-10-1
A113	Line-10-1
A131	Line-10-1
A161	Line-10-1
A181	Line-10-1
. .	. .

FIG.26

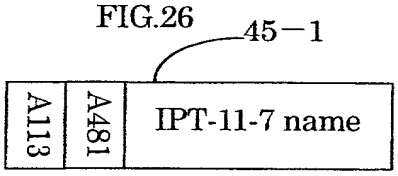


FIG.27

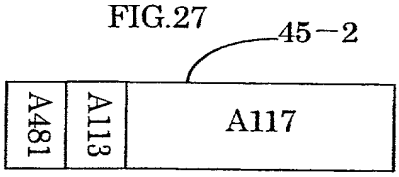


FIG.28

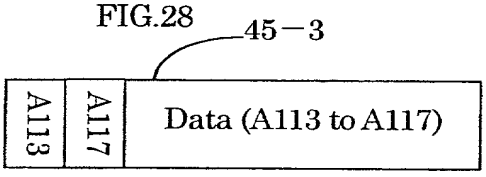


FIG.29

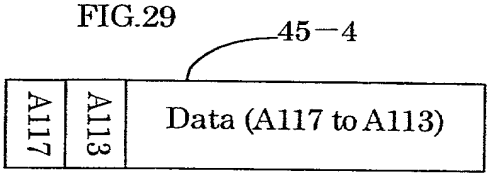


FIG.30

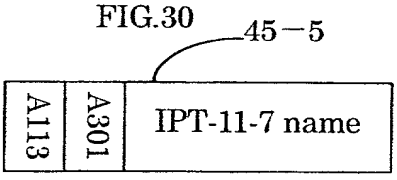


FIG.31

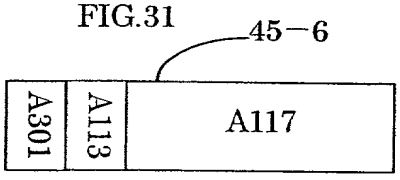


FIG.32

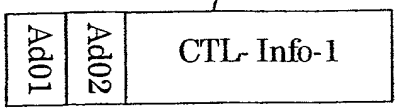


FIG.33

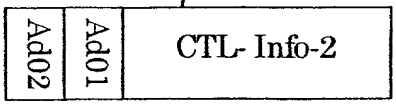


FIG.34

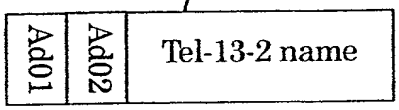


FIG.35

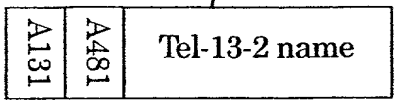


FIG.36

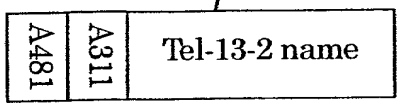


FIG.37

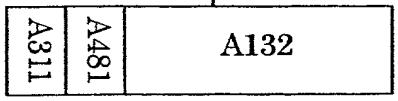


FIG.38

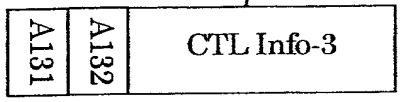


FIG.39

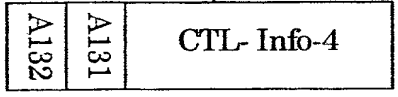


FIG.40

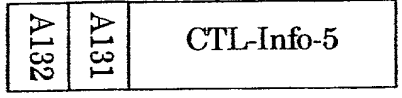


FIG.41

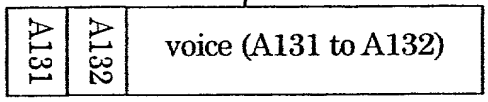


FIG.42

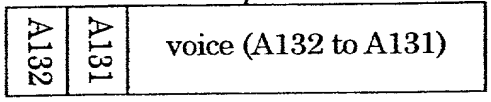


FIG.43

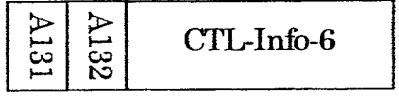


FIG.44

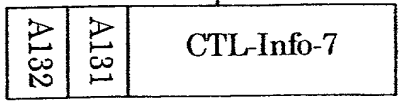


FIG.45

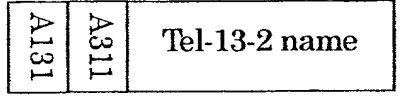


FIG.46

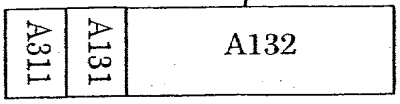


FIG.47

100-1

Line Identifier	Phone No. (Host Name)	Terminal IP Address	Kind of Terminal	Speed	Kind of Line
53−1	81-3-1234-5679	32.3.53.1	H323T	64Kbps	ISDN
54−1	81-3-1200-2002	32.3.54.1	H323V	1.5Mbps	
55−1	81-47-325-3887	20.0.55.1	A-tel	64Kbps	ISDN
. .	. .	. .			. .

FIG.48

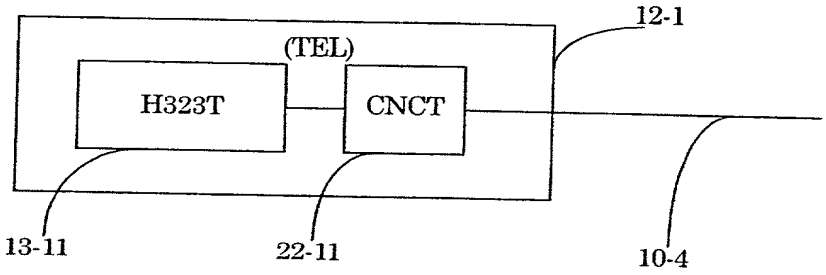


FIG.49

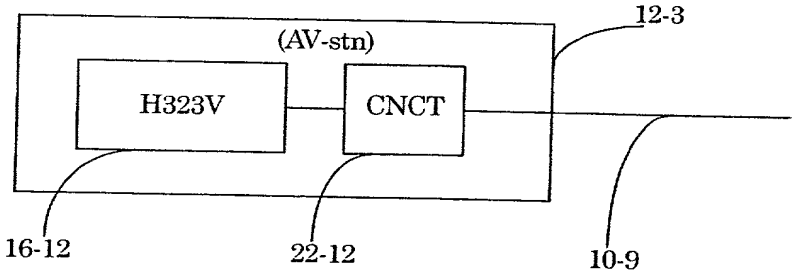


FIG.50

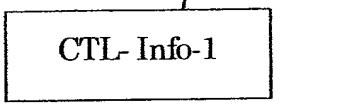


FIG.51

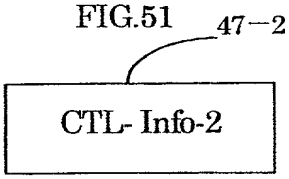


FIG.52

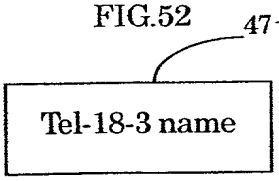


FIG.53

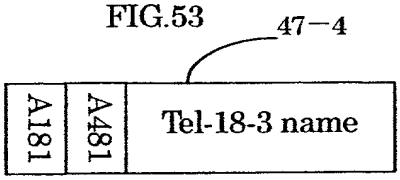


FIG.54

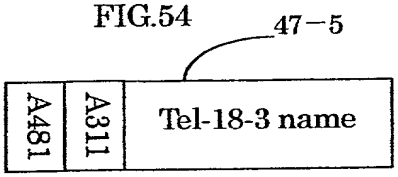


FIG.55

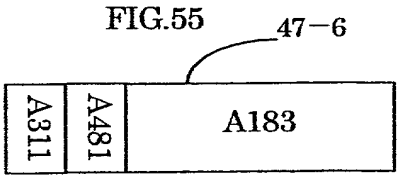


FIG.56

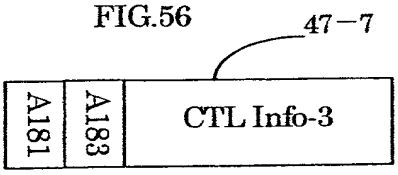


FIG.57

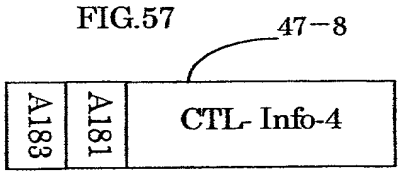


FIG.58

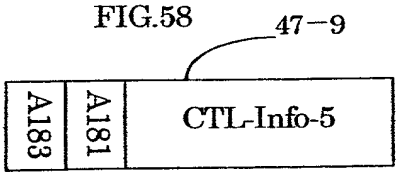


FIG.59

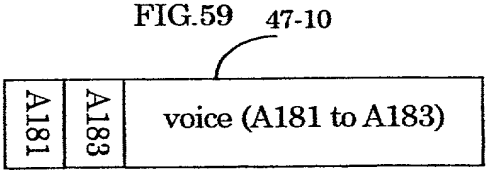


FIG.60

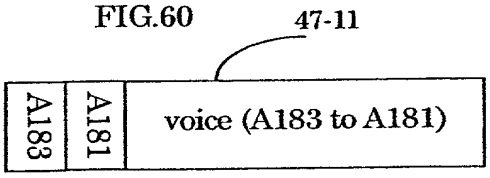


FIG.61

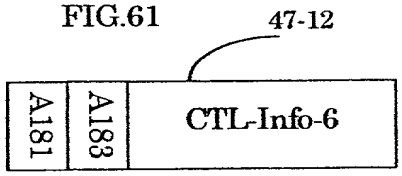


FIG.62

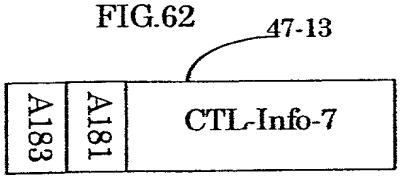


FIG.63

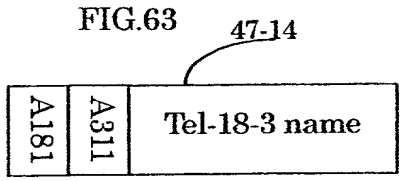


FIG.64

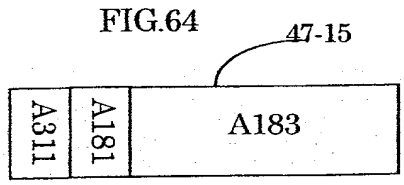


FIG.65

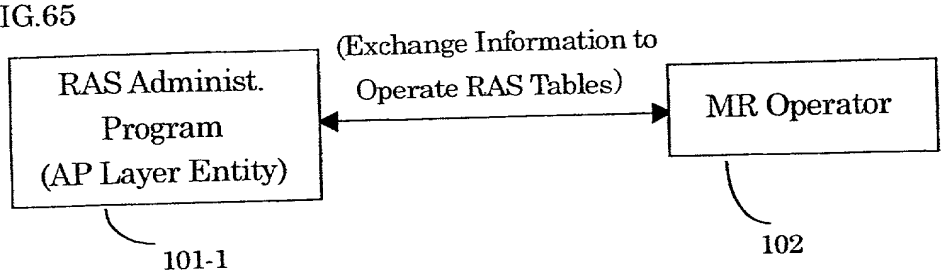


FIG.66

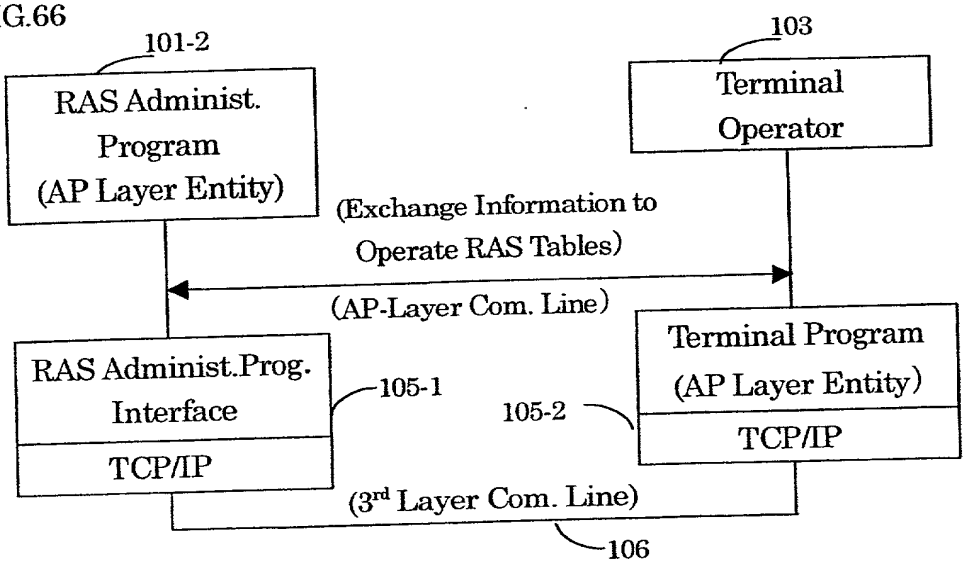


FIG.67

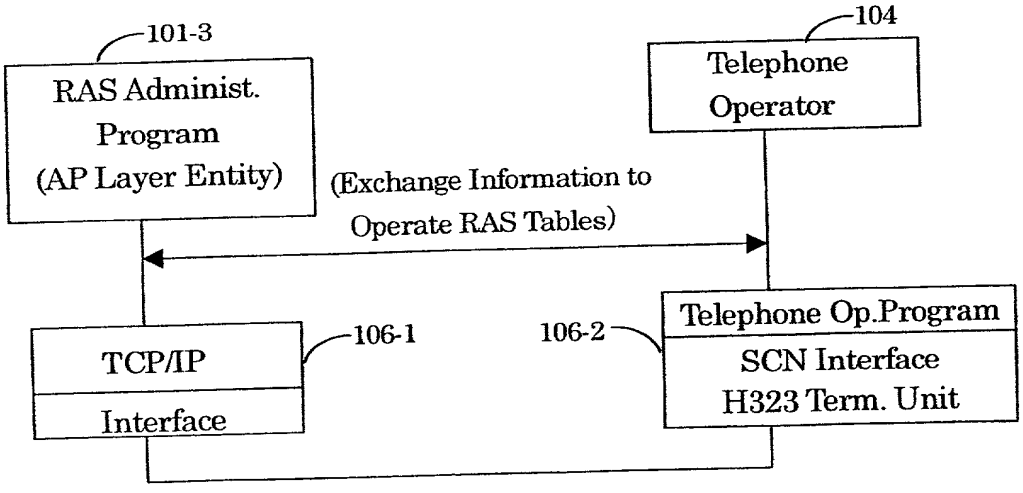


FIG.68

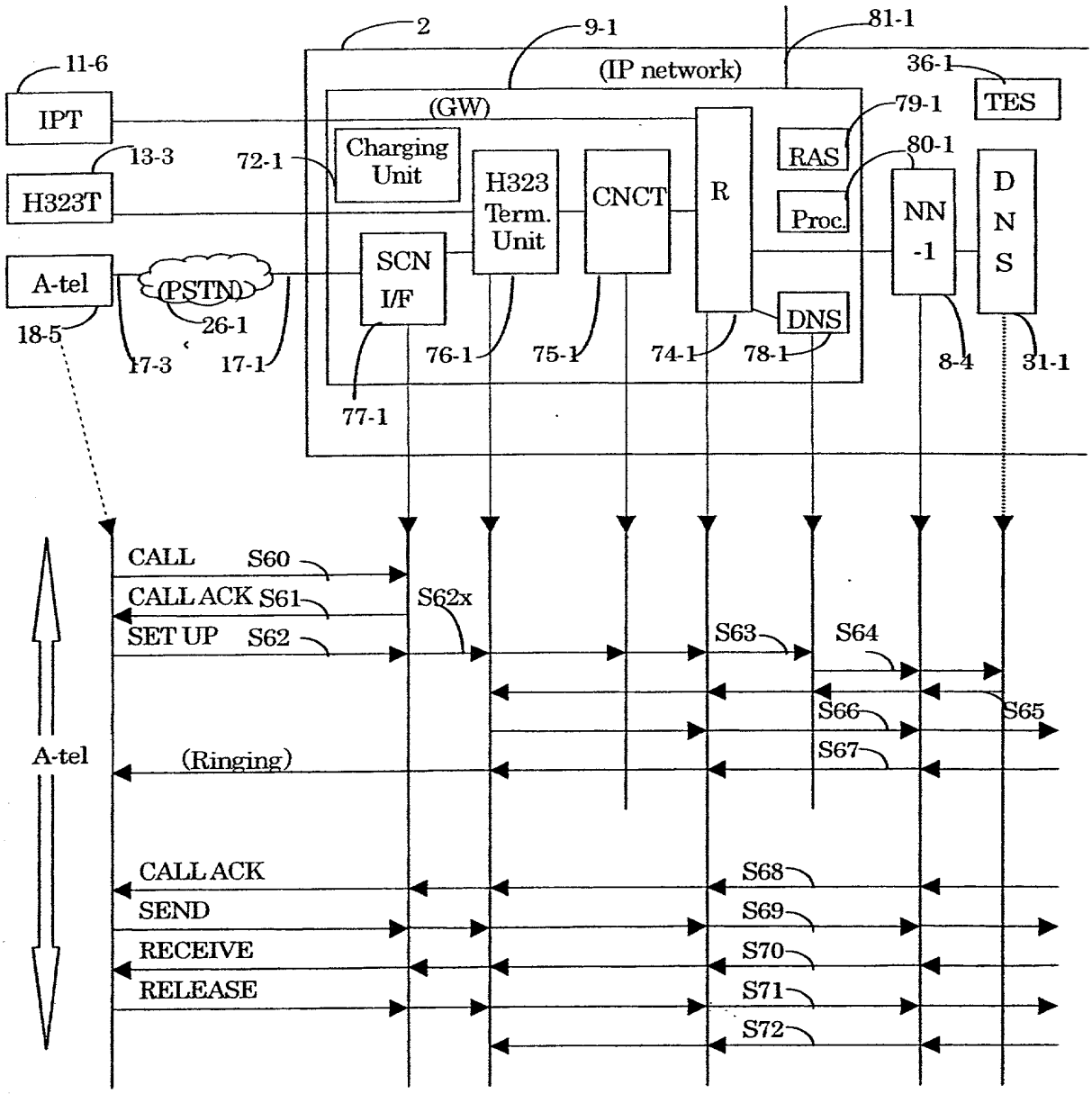

2
9-1
81-1
11-6
(IP network)
36-1
IPT
(GW)
TES
79-1
13-3
72-1
Charging Unit
H323 Term. Unit
CNCT
R
RAS
80-1
H323T
Proc.
NN -1
D N S
A-tel
SCN I/F
(PSTN)
DNS
18-5
26-1
17-3
17-1
76-1
75-1
74-1
78-1
8-4
31-1
77-1
CALL S60
CALL ACK S61
SET UP S62
S62x
S63
S64
S65
S66
S67
A-tel
(Ringing)
CALL ACK
SEND
RECEIVE
RELEASE
S68
S69
S70
S71
S72

FIG.69

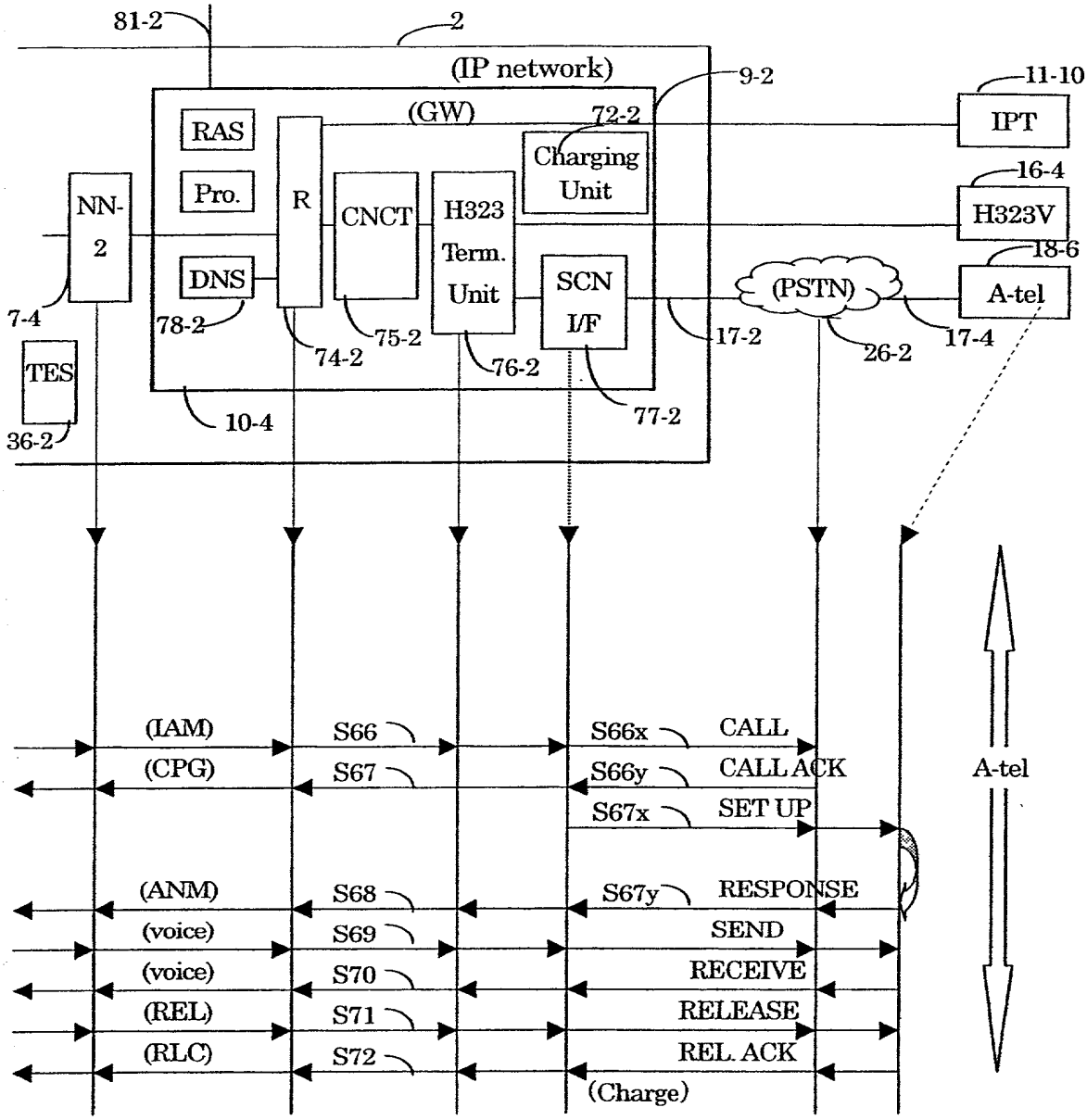

81-2
2
(IP network)
9-2
11-10
(GW)
72-2
RAS
Pro.
R
CNCT
H323
Term.
Unit
Charging
Unit
IPT
16-4
H323V
NN-
2
DNS
SCN
I/F
18-6
A-tel
(PSTN)
7-4
78-2
74-2
75-2
76-2
77-2
17-2
26-2
17-4
TES
36-2
10-4
(IAM)
S66
S66x
CALL
(CPG)
S67
S66y
CALL ACK
S67x
SET UP
A-tel
(ANM)
S68
S67y
RESPONSE
(voice)
S69
SEND
(voice)
S70
RECEIVE
(REL)
S71
RELEASE
(RLC)
S72
REL. ACK
(Charge)

FIG.70

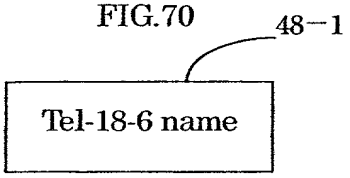


FIG.71

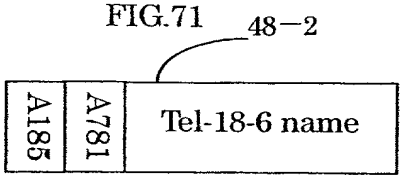


FIG.72

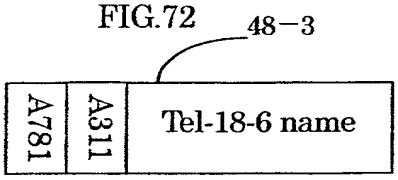


FIG.73

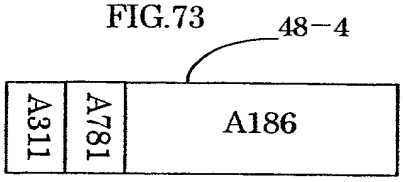


FIG.74

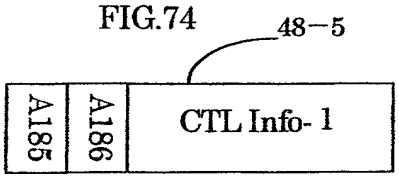


FIG.75

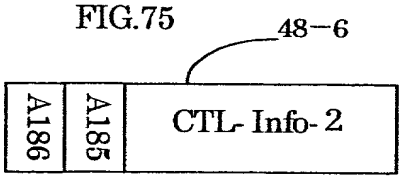


FIG.76

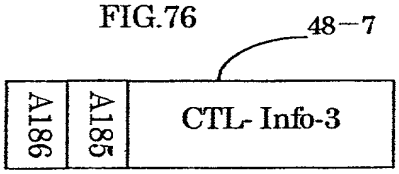


FIG.77

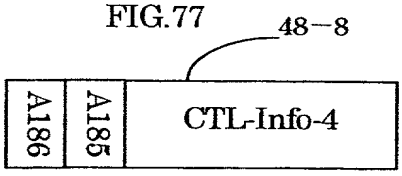


FIG.78

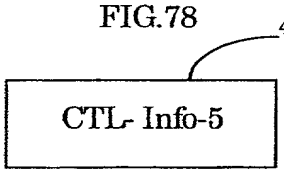


Fig.79

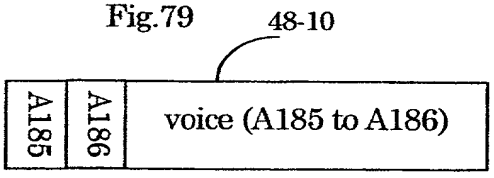


FIG.80

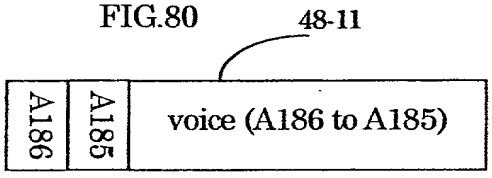


FIG.81

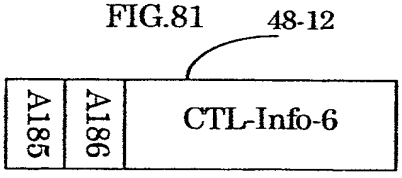


FIG.82

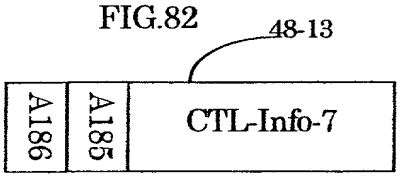


FIG.83

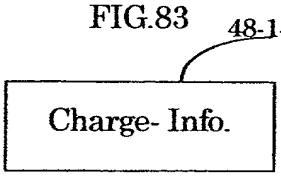


FIG.84

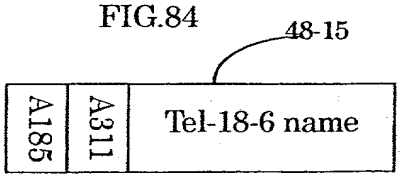


FIG.85

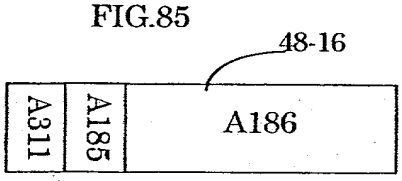


FIG.86

44 — 2

External IP Address	Com. Line Identification Symbol
A781	Line-17-1
A116	Line-17-1
A133	Line-17-1
A185	Line-17-1
. .	. .

FIG.87

100-2

Line Identifier	Telephone No. (Host Name)	Terminal IP Address	Kind of Terminal	Speed	Kind of Com. Line
1 7 − 1	81-3-9876-5432	100.101.102.103	A-tel	64kbps	ISDN
· ·	81-3-9876-5431	110.111.112.113	· ·	· ·	ISDN

FIG.88

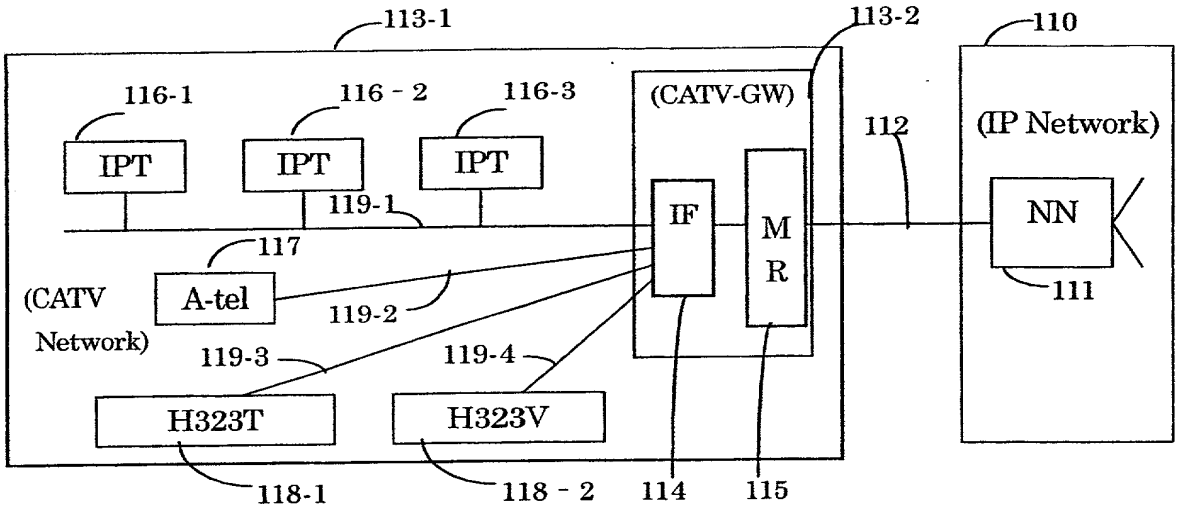


FIG.89

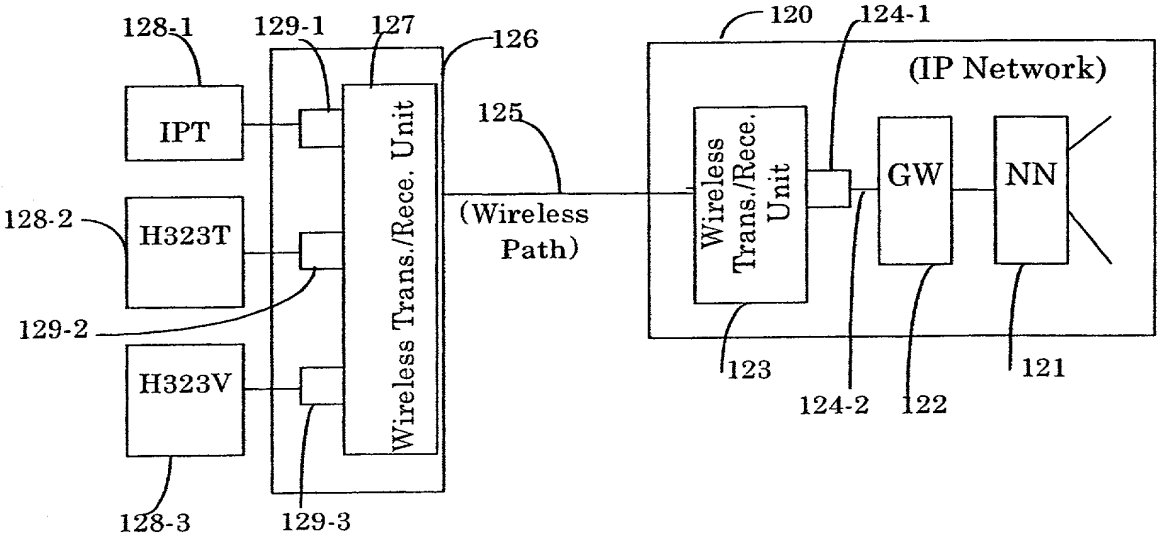
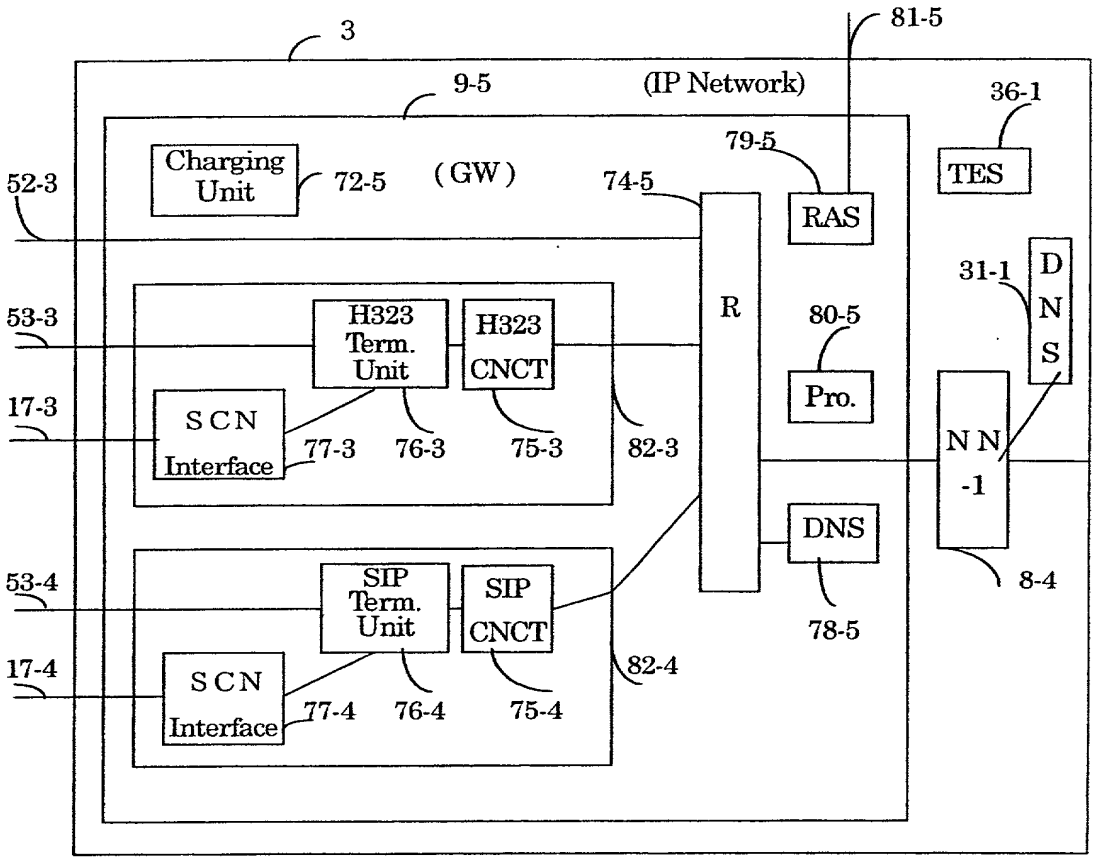
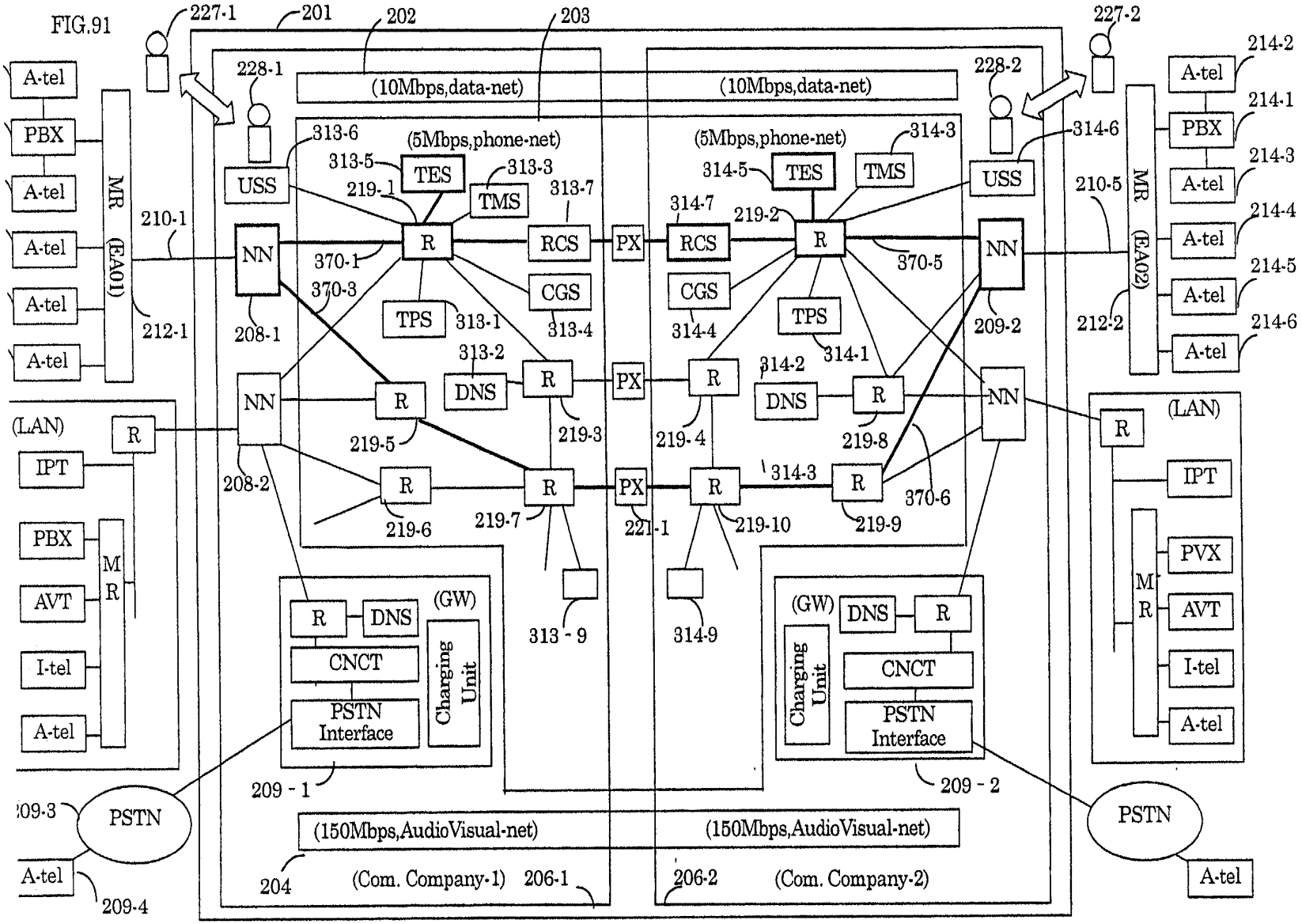


FIG.90


3
81-5
9-5
(IP Network)
36-1
Charging Unit
72-5
(GW)
79-5
TES
52-3
74-5
RAS
31-1
DNS
53-3
H323 Term. Unit
H323 CNCT
R
80-5
Pro.
17-3
SCN Interface
77-3
76-3
75-3
82-3
NN -1
DNS
53-4
SIP Term. Unit
SIP CNCT
82-4
17-4
SCN Interface
77-4
76-4
75-4
78-5
8-4

JP2000-2824560

FIG.91



TOZ280 '29Z28860

FIG.92

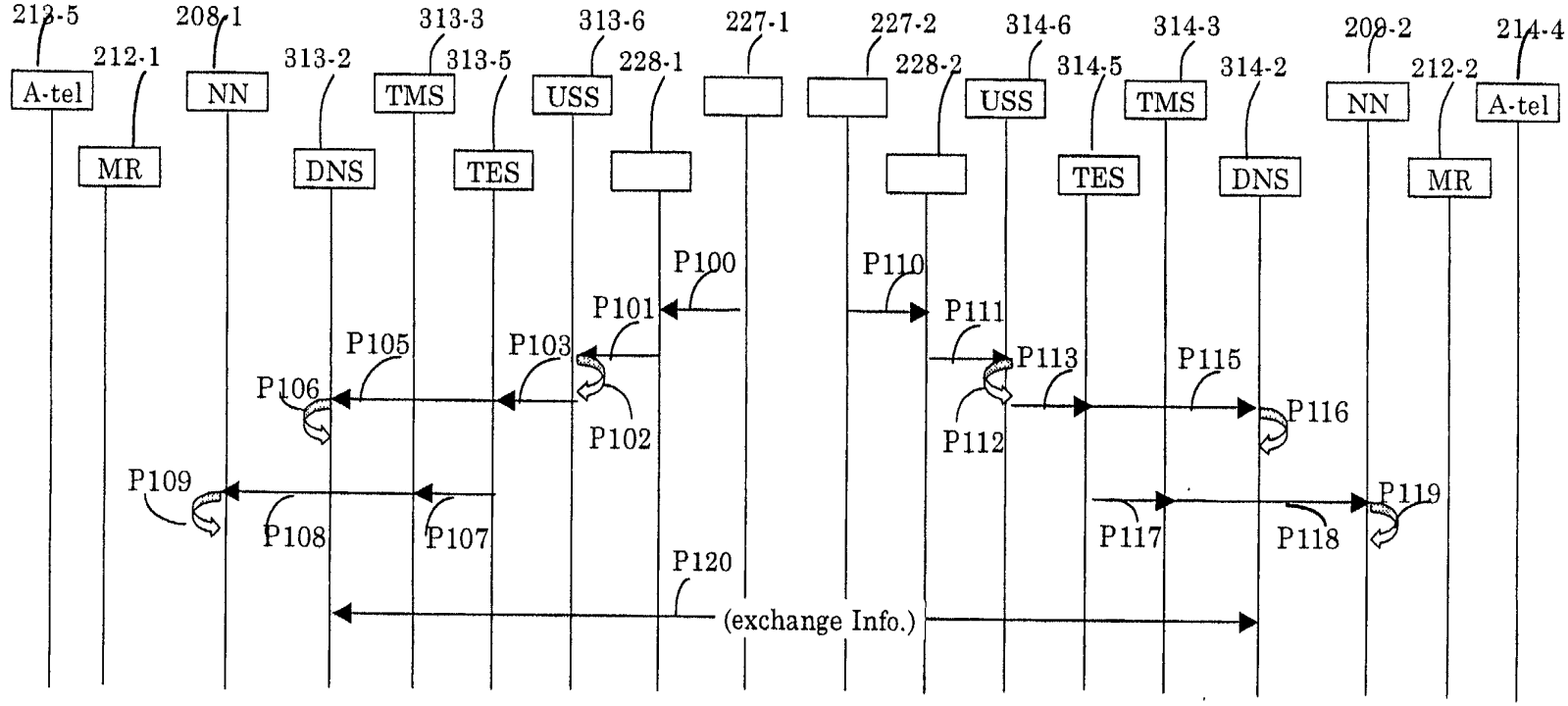


FIG.93

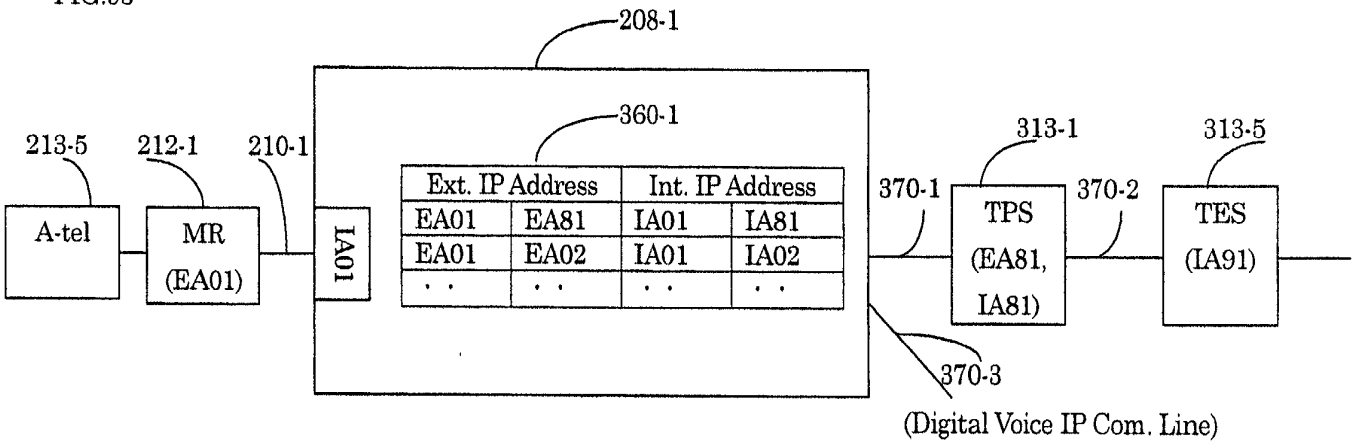

208-1
360-1
213-5
212-1
210-1
A-tel
MR
(EA01)
IA01
Ext. IP Address
Int. IP Address
EA01
EA81
IA01
IA81
EA01
EA02
IA01
IA02
370-1
313-1
313-5
370-2
TPS
(EA81,
IA81)
TES
(IA91)
370-3
(Digital Voice IP Com. Line)

FIG.94

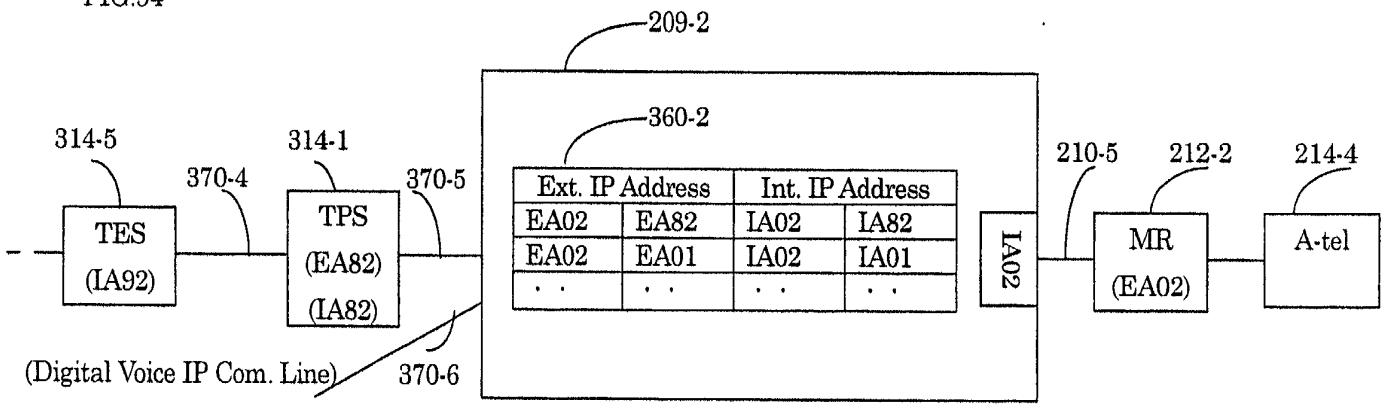

209-2
360-2
314-5
314-1
370-4
370-5
TES
(IA92)
TPS
(EA82)
(IA82)
Ext. IP Address
Int. IP Address
EA02
EA82
IA02
IA82
EA02
EA01
IA02
IA01
210-5
212-2
214-4
IA02
MR
(EA02)
A-tel
(Digital Voice IP Com. Line)
370-6

FIG.95

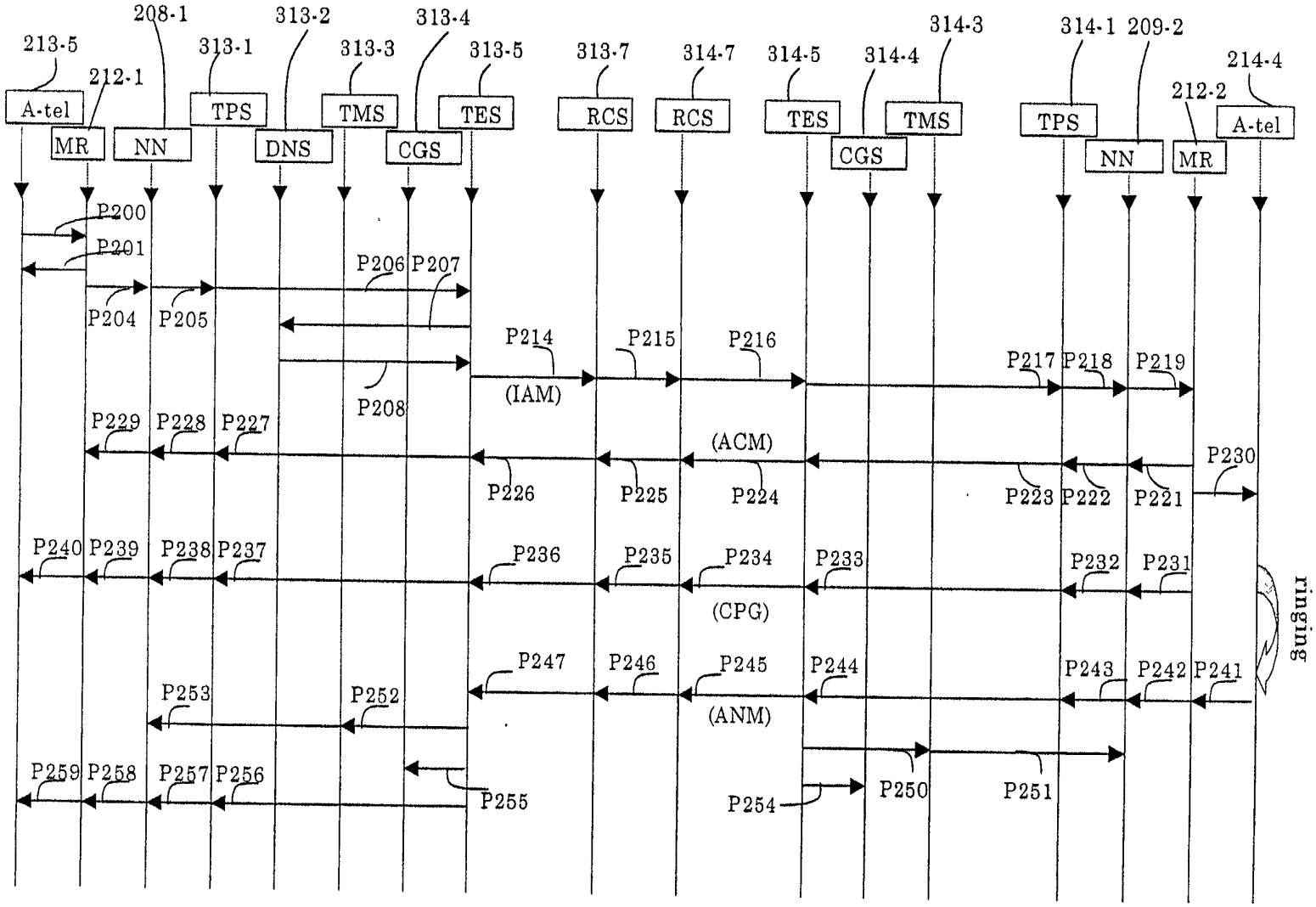

213-5
A-tel
212-1
MR
208-1
NN
313-1
TPS
313-2
DNS
313-3
TMS
313-4
CGS
313-5
TES
313-7
RCS
314-7
RCS
314-5
TES
314-4
CGS
314-3
TMS
314-1
TPS
209-2
NN
212-2
MR
214-4
A-tel
P200
P201
P204
P205
P206
P207
P208
P214
(IAM)
P215
P216
P217
P218
P219
P229
P228
P227
P226
P225
(ACM)
P224
P223
P222
P221
P230
P240
P239
P238
P237
P236
P235
P234
(CPG)
P233
P232
P231
P247
P246
P245
(ANM)
P244
P243
P242
P241
P253
P252
P255
P254
P250
P251
P259
P258
P257
P256
ringing

FIG.96

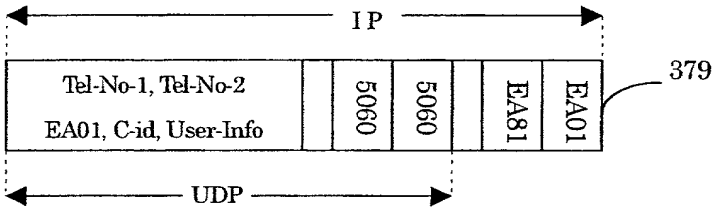


FIG.97

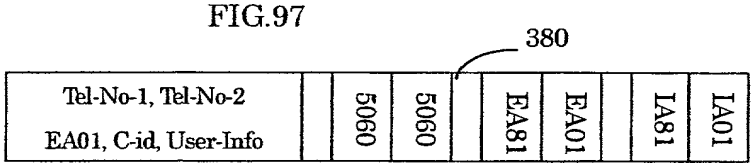


FIG.98

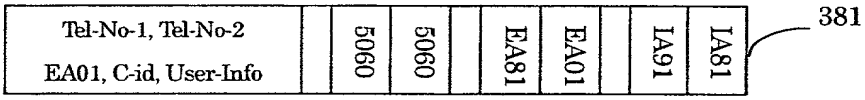


FIG.99

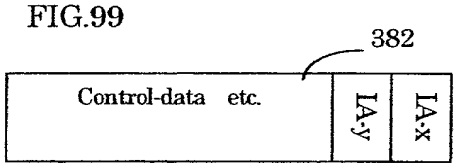


FIG.100

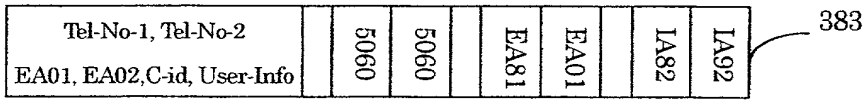


FIG.101

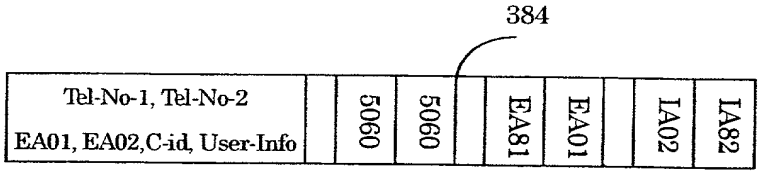


FIG.102

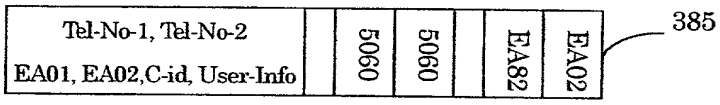


FIG.103

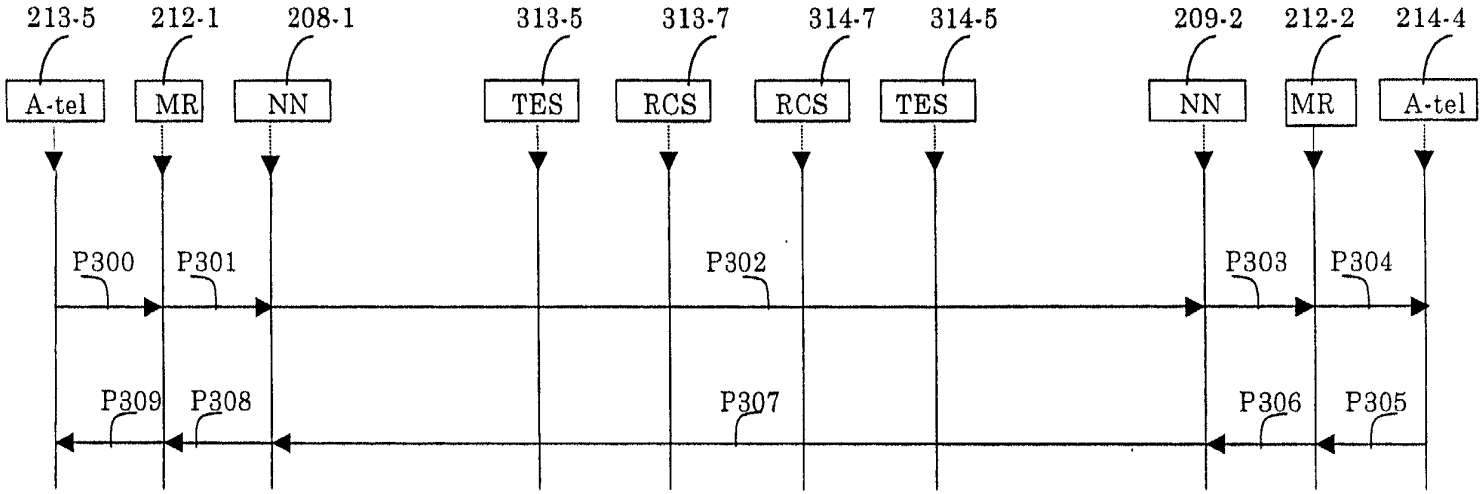

213-5
212-1
208-1
313-5
313-7
314-7
314-5
209-2
212-2
214-4
A-tel
MR
NN
TES
RCS
RCS
TES
NN
MR
A-tel
P300
P301
P302
P303
P304
P309
P308
P307
P306
P305

FIG.104

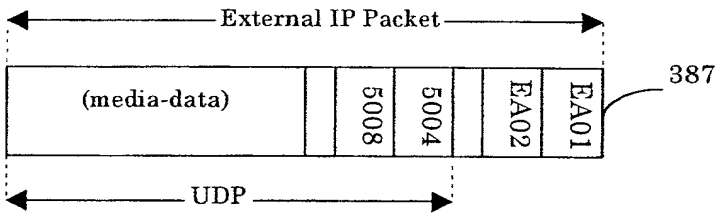


FIG.105

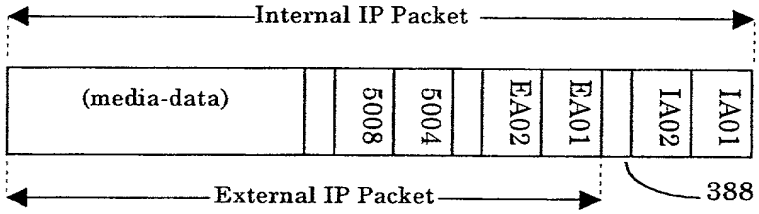


FIG.106

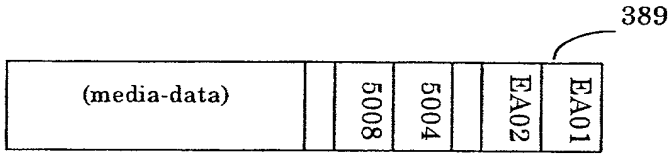


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FIG.107

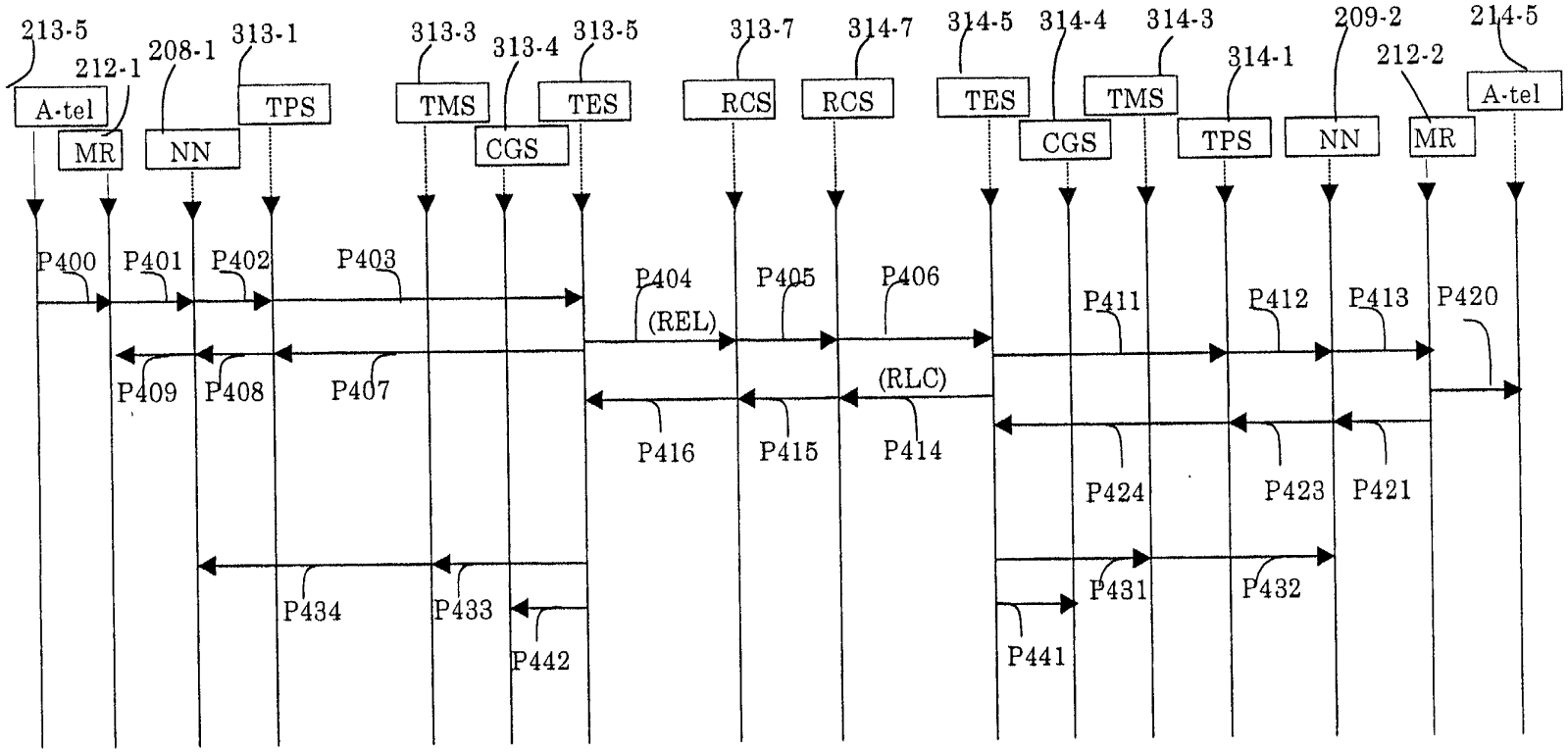


FIG.108

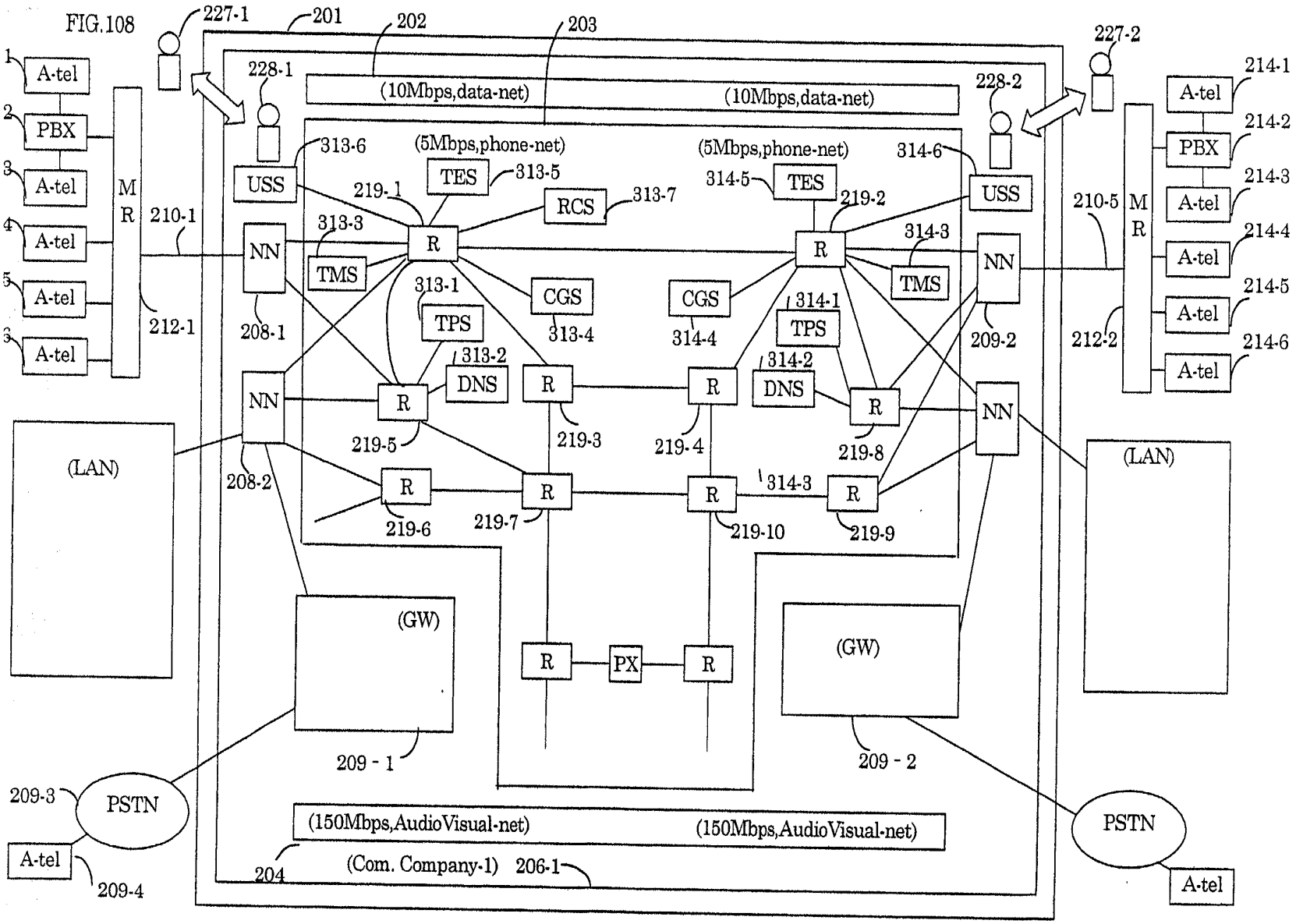
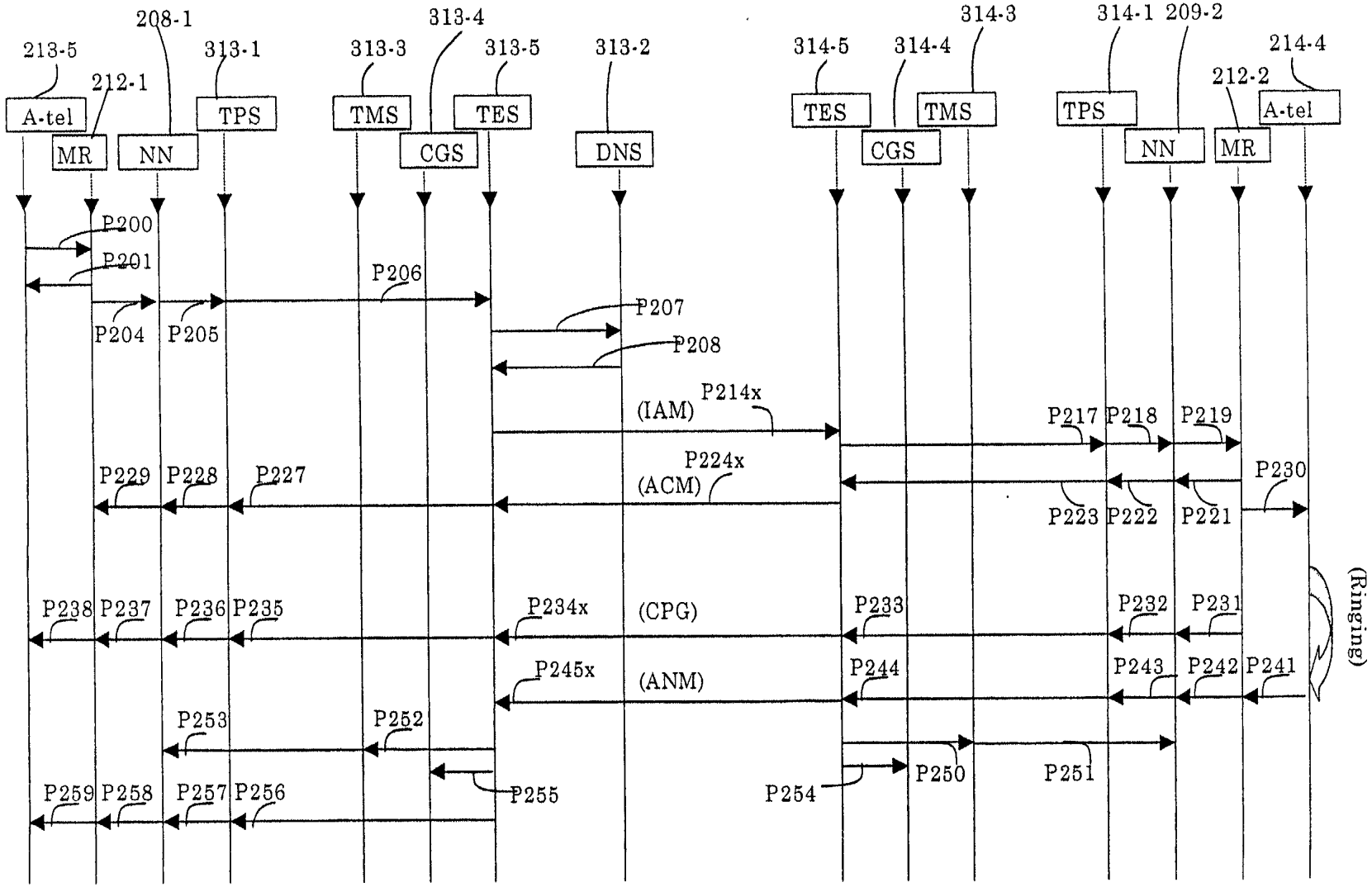

227-1
201
202
203
228-1
(10Mbps,data-net)
(10Mbps,data-net)
228-2
227-2
214-1
214-2
214-3
214-4
214-5
214-6
A-tel
PBX
A-tel
A-tel
A-tel
A-tel
M R
210-1
212-1
210-5
212-2
USS
313-6
(5Mbps,phone-net)
TES
313-5
219-1
RCS
313-7
(5Mbps,phone-net)
314-5
TES
219-2
314-6
USS
NN
313-3
TMS
R
R
314-3
TMS
NN
208-1
209-2
313-1
TPS
CGS
313-4
CGS
314-4
314-1
TPS
313-2
DNS
R
R
R
314-2
DNS
R
NN
219-5
219-3
219-4
219-8
(LAN)
208-2
R
R
R
314-3
R
(LAN)
219-6
219-7
219-10
219-9
(GW)
R
PX
R
(GW)
209 - 1
209 - 2
209-3
PSTN
(150Mbps,AudioVisual-net)
(150Mbps,AudioVisual-net)
PSTN
A-tel
204
(Com. Company-1)
206-1
209-4
A-tel

FIG.109


213-5
A-tel
212-1
MR
208-1
NN
313-1
TPS
313-3
TMS
313-4
CGS
313-5
TES
313-2
DNS
314-5
TES
314-4
CGS
314-3
TMS
314-1
TPS
209-2
NN
212-2
MR
214-4
A-tel
P200
P201
P206
P204
P205
P207
P208
(IAM)
P214x
P217
P218
P219
P224x
(ACM)
P229
P228
P227
P230
P223
P222
P221
(Ringing)
P238
P237
P236
P235
P234x
(CPG)
P233
P232
P231
P245x
(ANM)
P244
P243
P242
P241
P253
P252
P255
P254
P250
P251
P259
P258
P257
P256

TO/2807/2927/2860

FIG.110

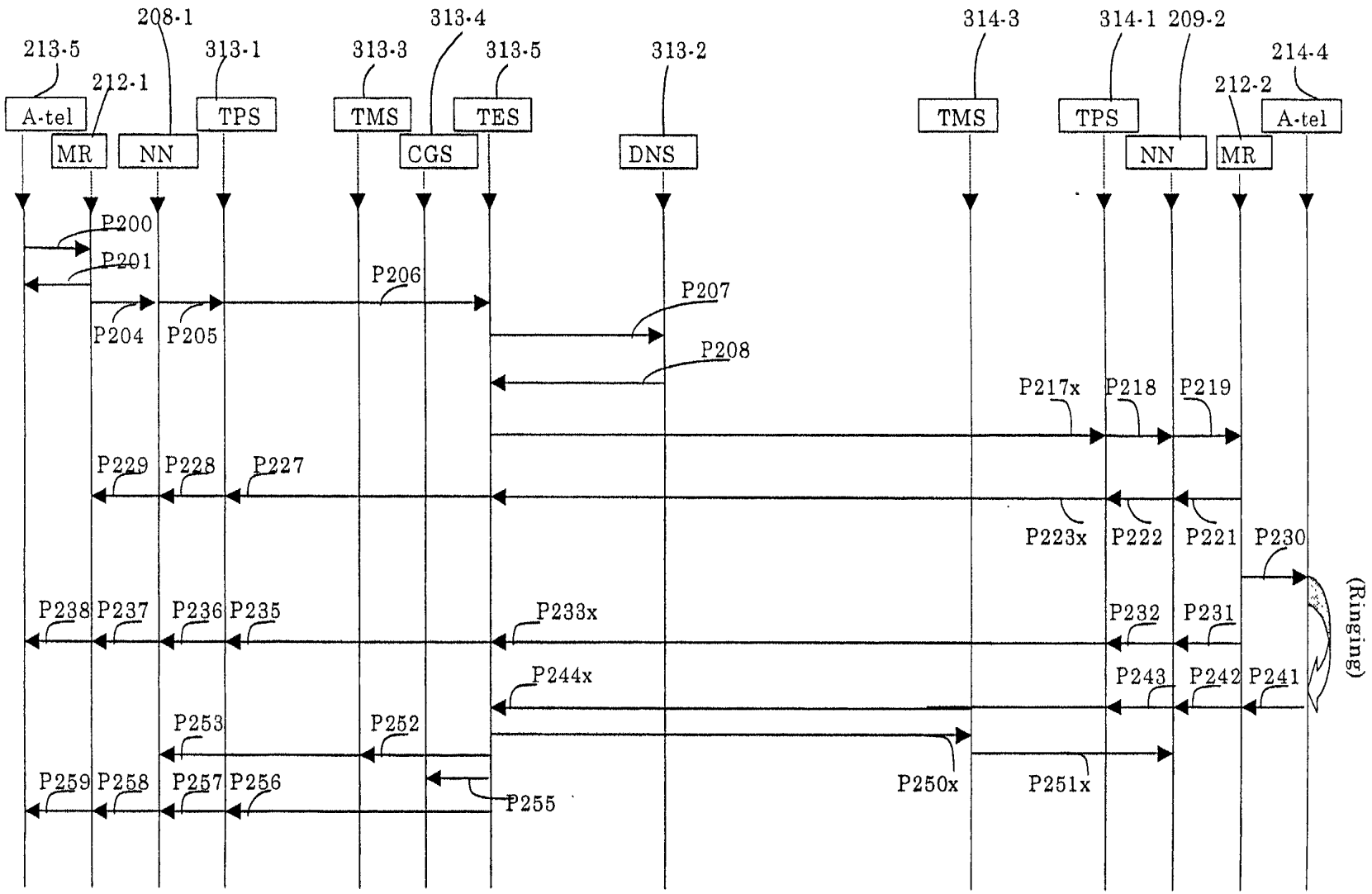


FIG.111

No.	Telephone No.	Own Com. ?	Iden. Information of Another Company
1	81-3-5414-xxxx	No.	Com-130
2	1-2245-5678	No.	Com-025
3	81-47-325-3887	Yes	
4	81-2245-56xx	Yes	
· ·	81-6-1234- xxxx	Yes	
n	1-2345-2345	No	Com-840

FIG.112

No.	Telephone No.	Operated by This TES ? (Own Company)	Iden. Inform.of Another TES (Own Company)
1	81-47-325-3887	Yes	
2	81-2245-56xx	No.	100.10.11.40
3	81-6-1234- xxxx	Yes	
· ·			
m	1-2345-2345	No	100.10.11.70

TD/2807/2822860

FIG.113

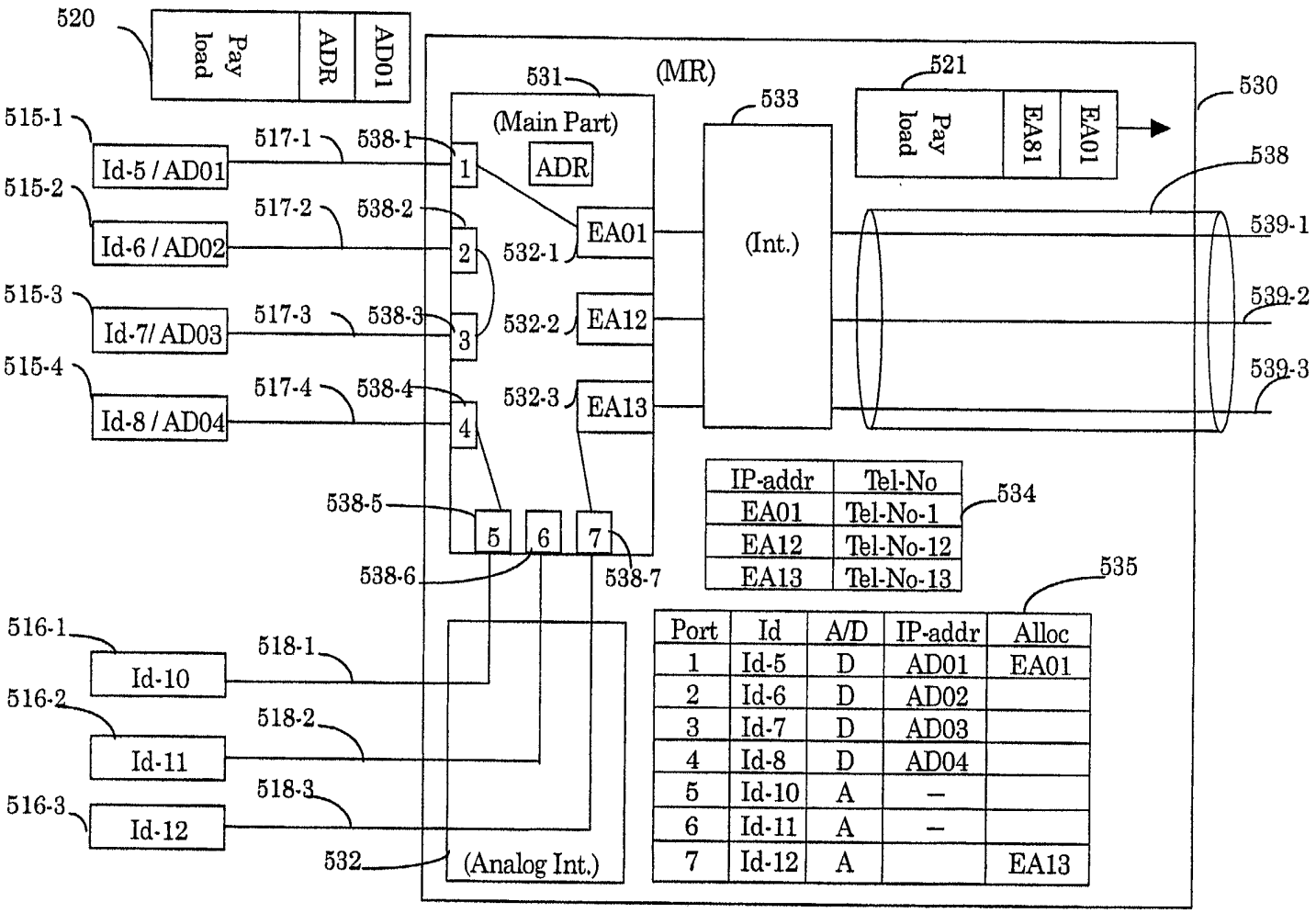


FIG.114

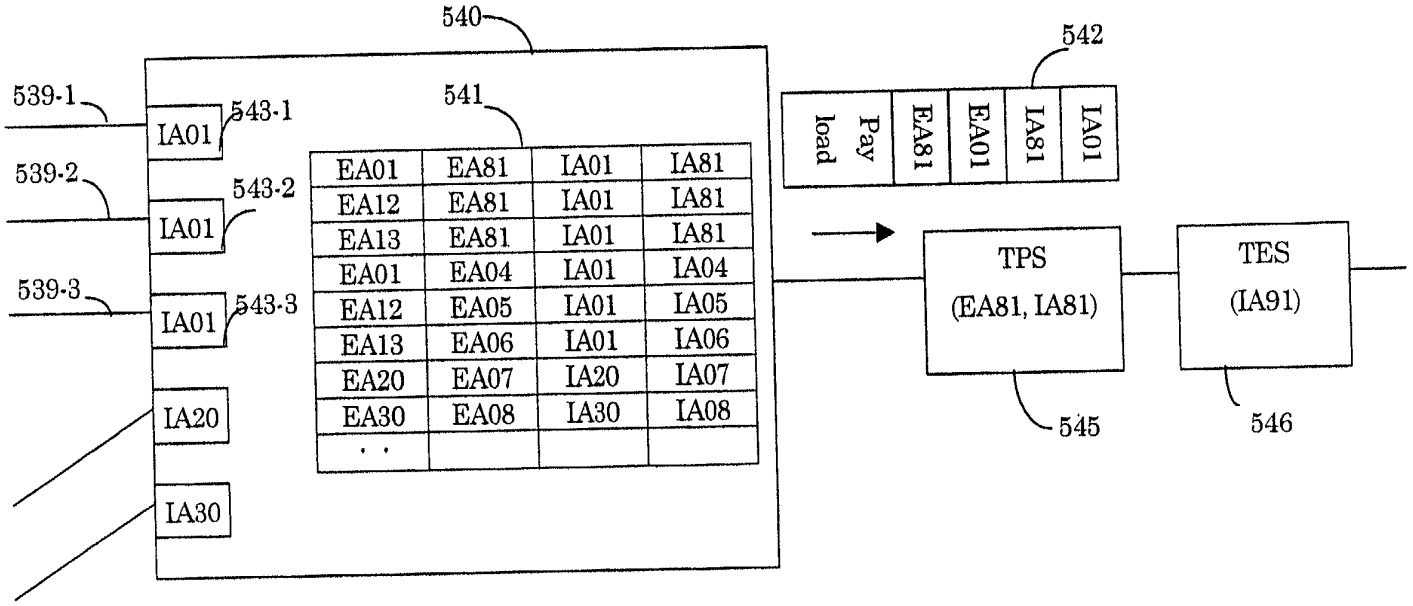

540
539-1
IA01
543-1
541
539-2
IA01
543-2
539-3
IA01
543-3
IA20
IA30
EA01 EA81 IA01 IA81
EA12 EA81 IA01 IA81
EA13 EA81 IA01 IA81
EA01 EA04 IA01 IA04
EA12 EA05 IA01 IA05
EA13 EA06 IA01 IA06
EA20 EA07 IA20 IA07
EA30 EA08 IA30 IA08
542
Pay load
EA81
EA01
IA81
IA01
TPS
(EA81, IA81)
TES
(IA91)
545
546

FIG.115

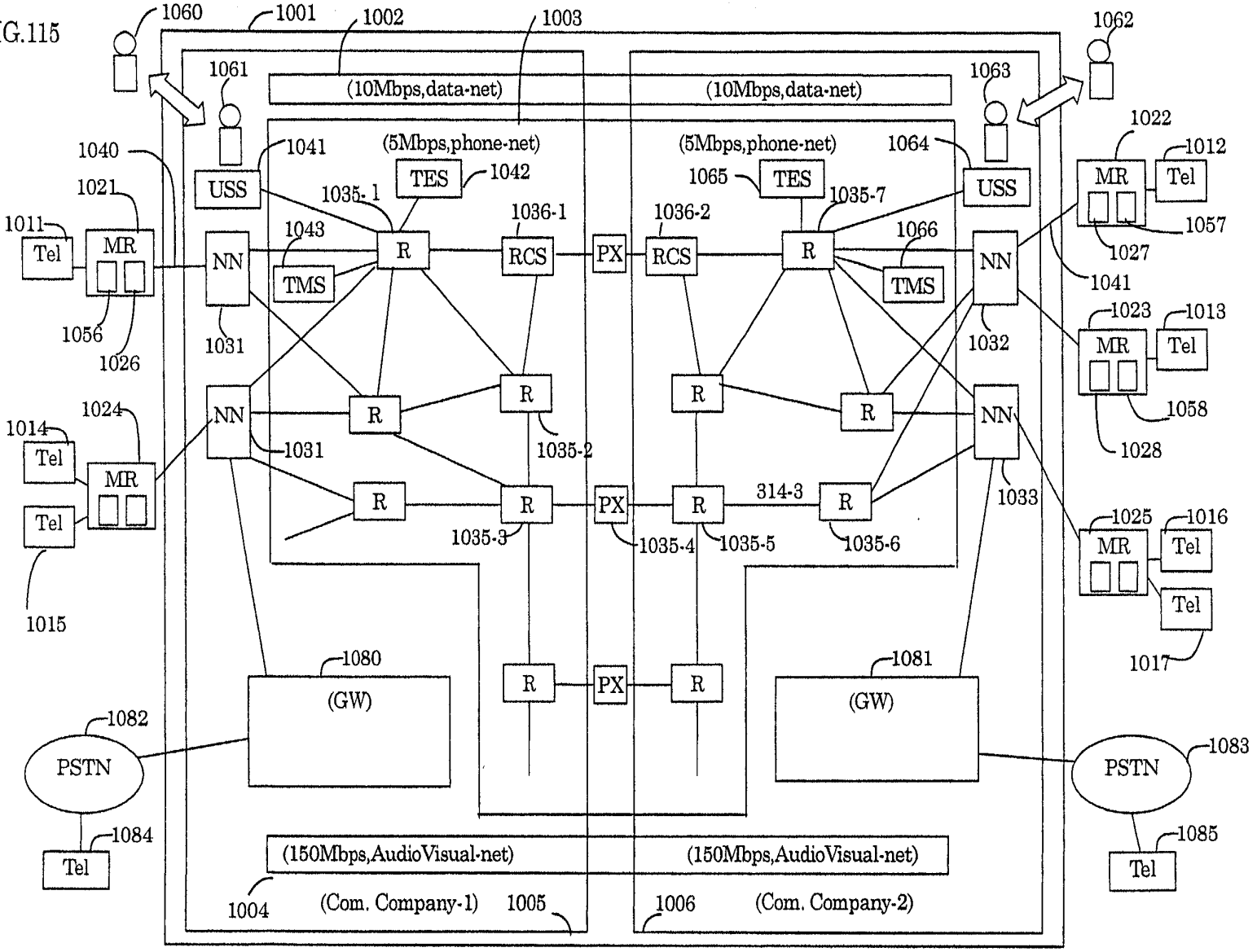

1060
1001
1002
1003
1062
1061
(10Mbps,data-net)
(10Mbps,data-net)
1063
1022
1040
1041
(5Mbps,phone-net)
(5Mbps,phone-net)
1064
1012
1021
USS
TES
1042
1065
TES
1035-7
USS
MR
Tel
1035-1
1036-1
1036-2
1011
1043
1066
1057
Tel
MR
NN
R
RCS
PX
RCS
R
NN
1027
TMS
TMS
1041
1023
1013
1056
1031
1032
MR
Tel
1026
1024
1058
NN
R
R
R
R
NN
1014
1031
1035-2
1028
Tel
MR
R
R
314-3
R
1033
1025
1016
Tel
1035-3
1035-4
1035-5
1035-6
MR
Tel
Tel
1017
1015
1080
1081
R
PX
R
(GW)
(GW)
1082
1083
PSTN
PSTN
1084
1085
Tel
Tel
(150Mbps,AudioVisual-net)
(150Mbps,AudioVisual-net)
1004
(Com. Company-1)
1005
1006
(Com. Company-2)

FIG.116

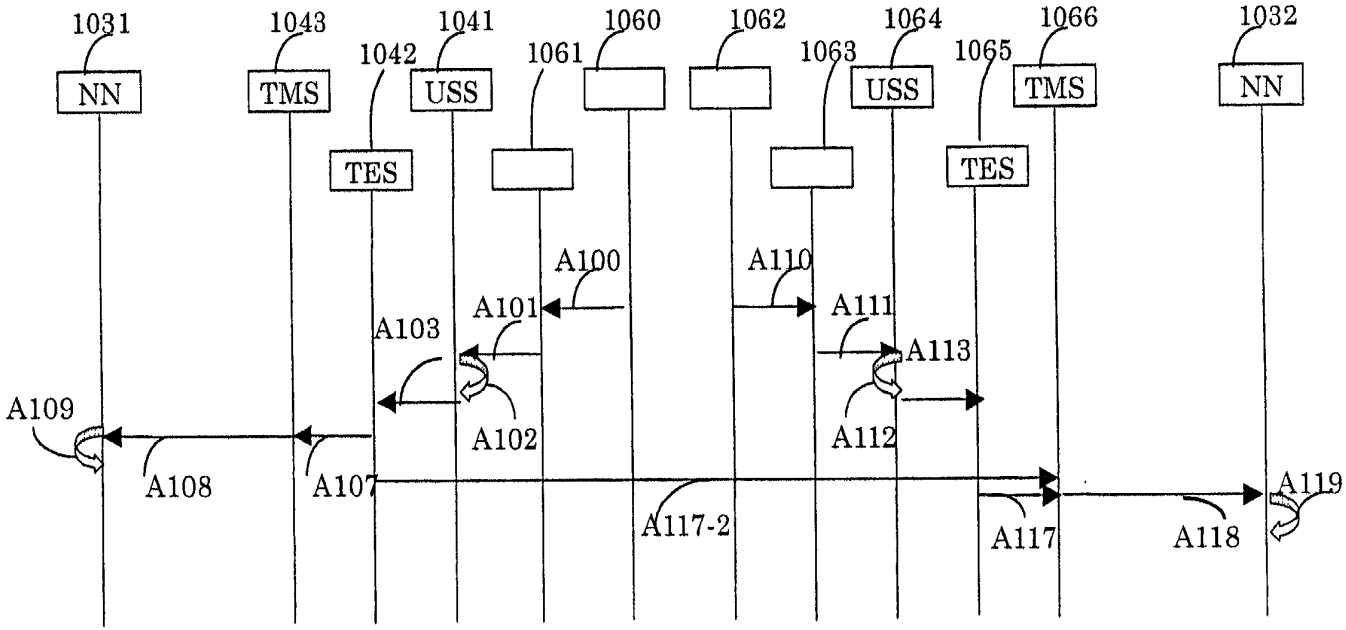

1031
1043
1042
1041
1061
1060
1062
1063
1064
1065
1066
1032
NN
TMS
TES
USS
USS
TES
TMS
NN
A100
A110
A101
A111
A103
A113
A109
A102
A112
A108
A107
A117-2
A117
A118
A119

FIG.117

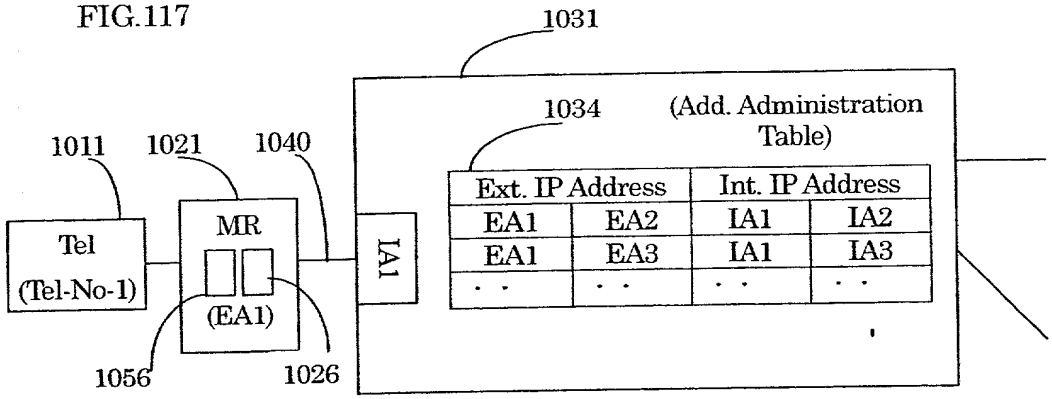


FIG.118

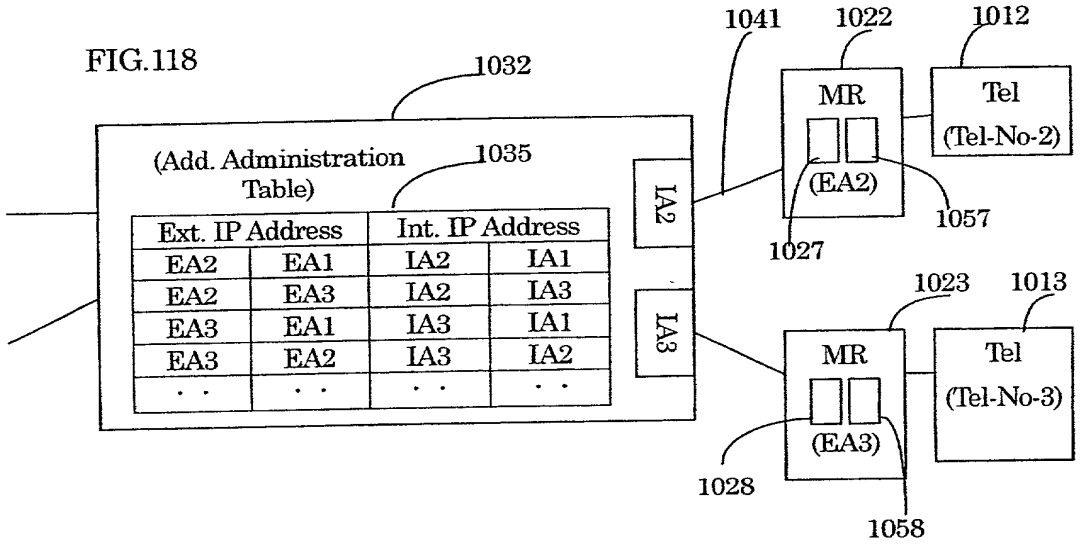


FIG.119

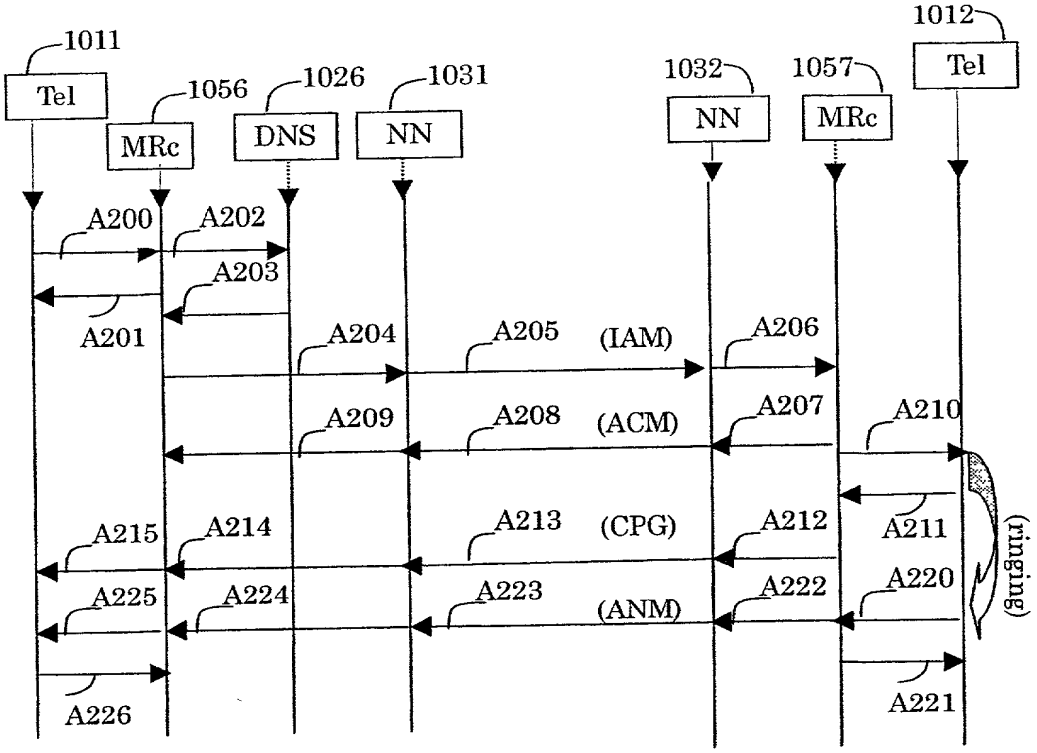

1011
Tel
1056
MRc
1026
DNS
1031
NN
1032
NN
1057
MRc
1012
Tel
A200
A202
A203
A201
A204
A205
(IAM)
A206
A209
A208
(ACM)
A207
A210
A211
(ringing)
A215
A214
A213
(CPG)
A212
A225
A224
A223
(ANM)
A222
A220
A226
A221

FIG.120

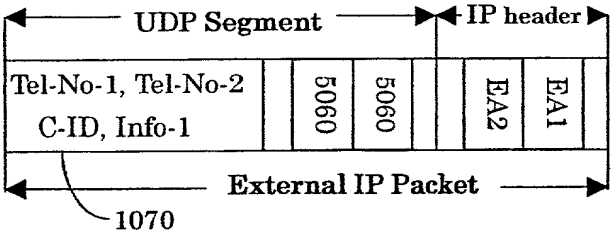


FIG.121

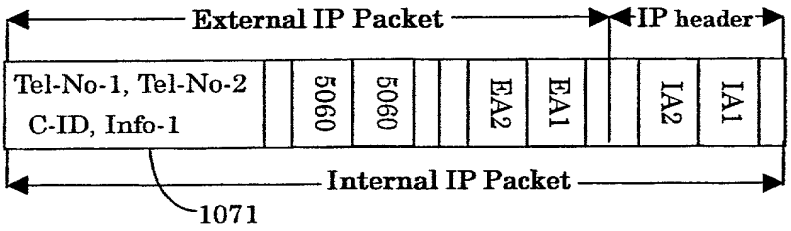


FIG.122

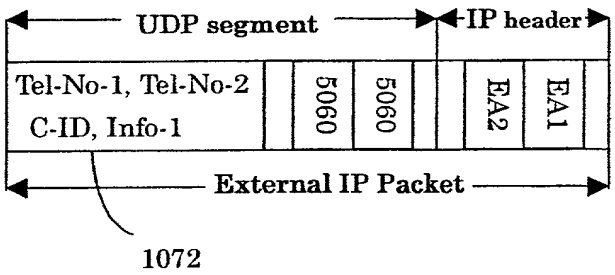


FIG.123

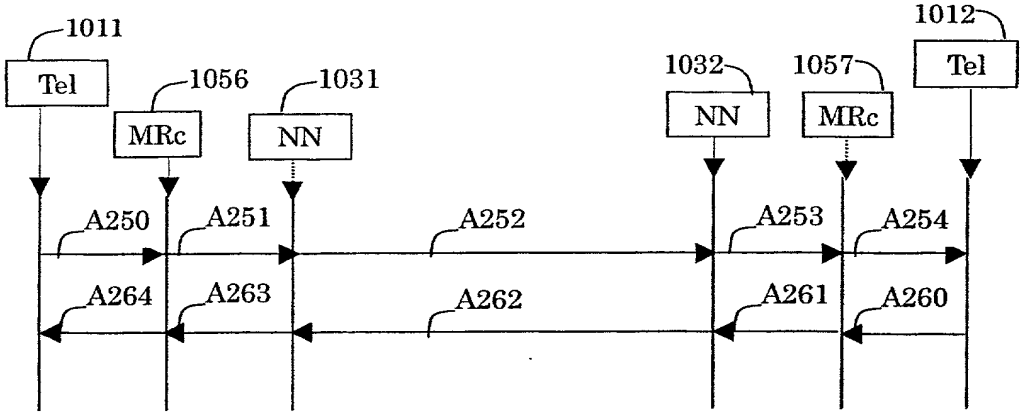


FIG.124

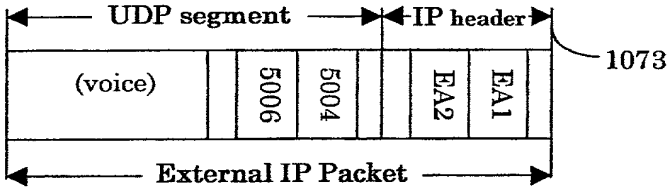


FIG.125

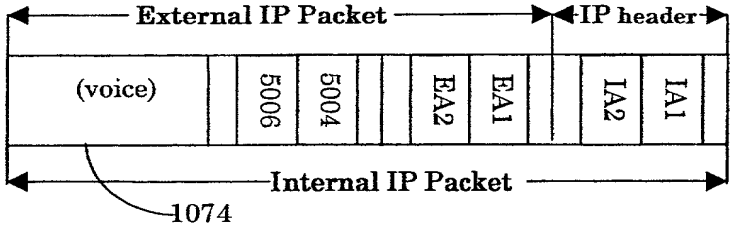


FIG.126

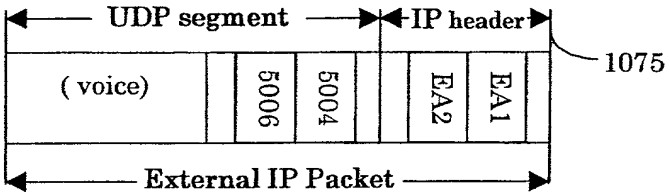


FIG.127

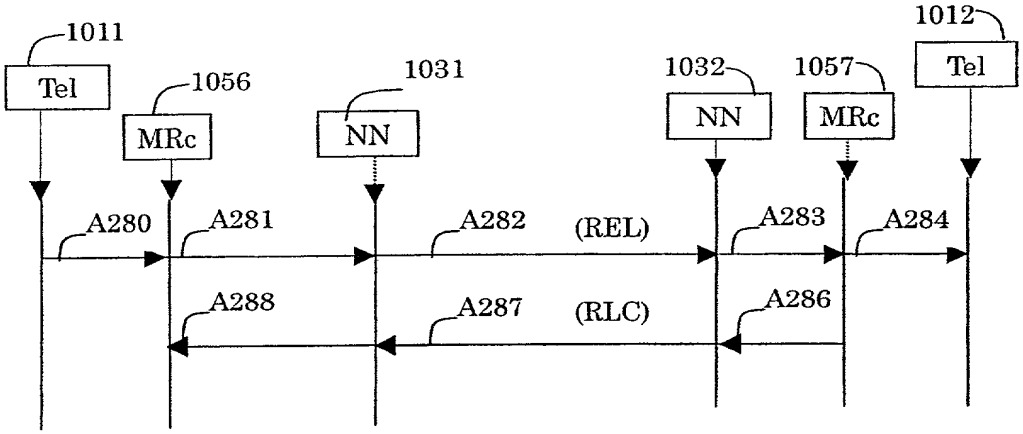


FIG.128

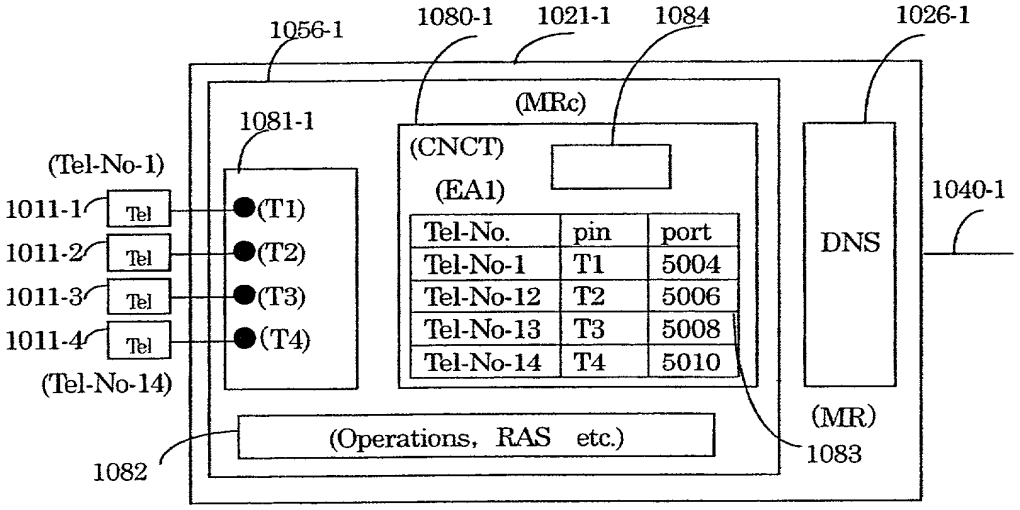


FIG.129

1083-1

Tel-No.	pin	port
Tel-No-1	T1	5004
Tel-No-1	T2	5006
Tel-No-1	T3	5008
Tel-No-1	T4	5010

FIG.130

1083-2

Tel-No.	pin	port
Tel-No-1	T1	
Tel-No-12	T2	5004
Tel-No-13	T3	
Tel-No-14	T4	

FIG.131

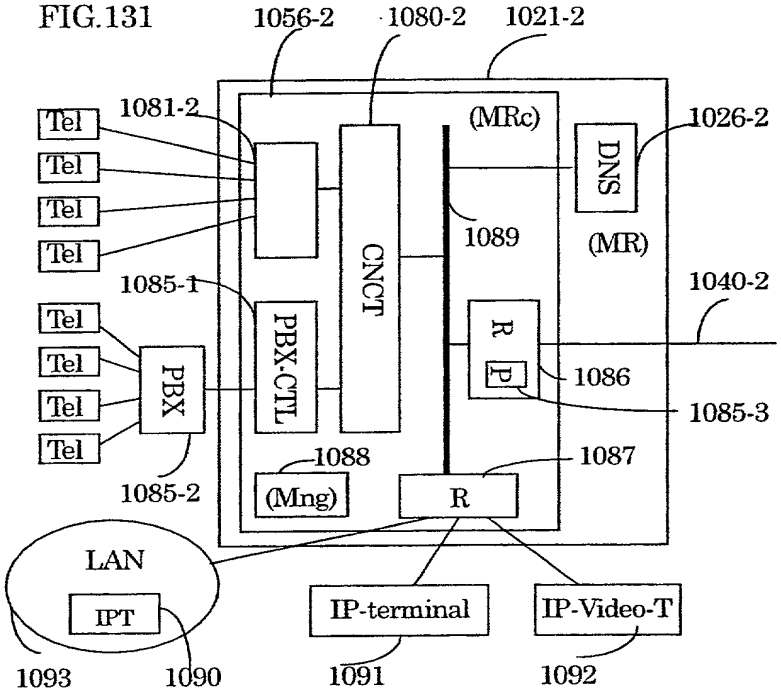


FIG.132

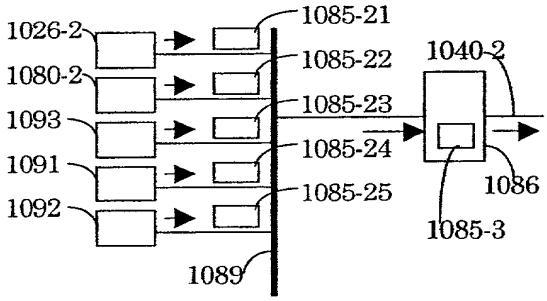


FIG.133

1085-3

(priority)	(port-No.)
2 (high)	108
1	5060, 5004 to 5020
0	others

FIG.134

1085-4

(priority)	(IP address－port No.)
2 (high)	150.1.2.3 －108
1	192.1.2.3－5060, 192.1.2.3－(5004 to 5020)
0	others

FIG.135

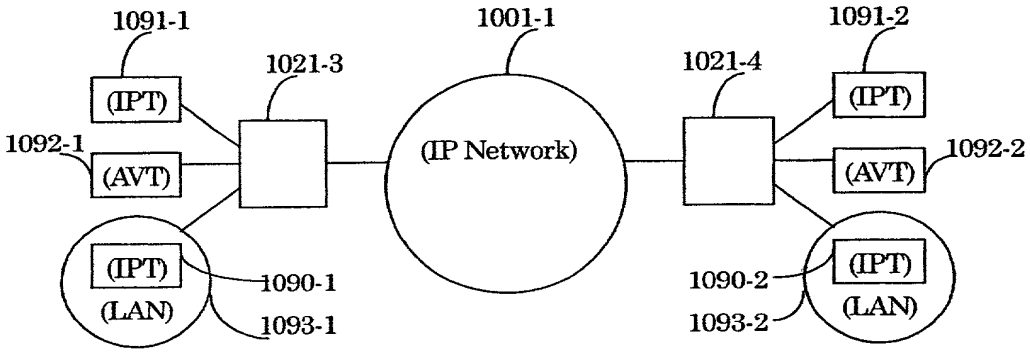


FIG.136

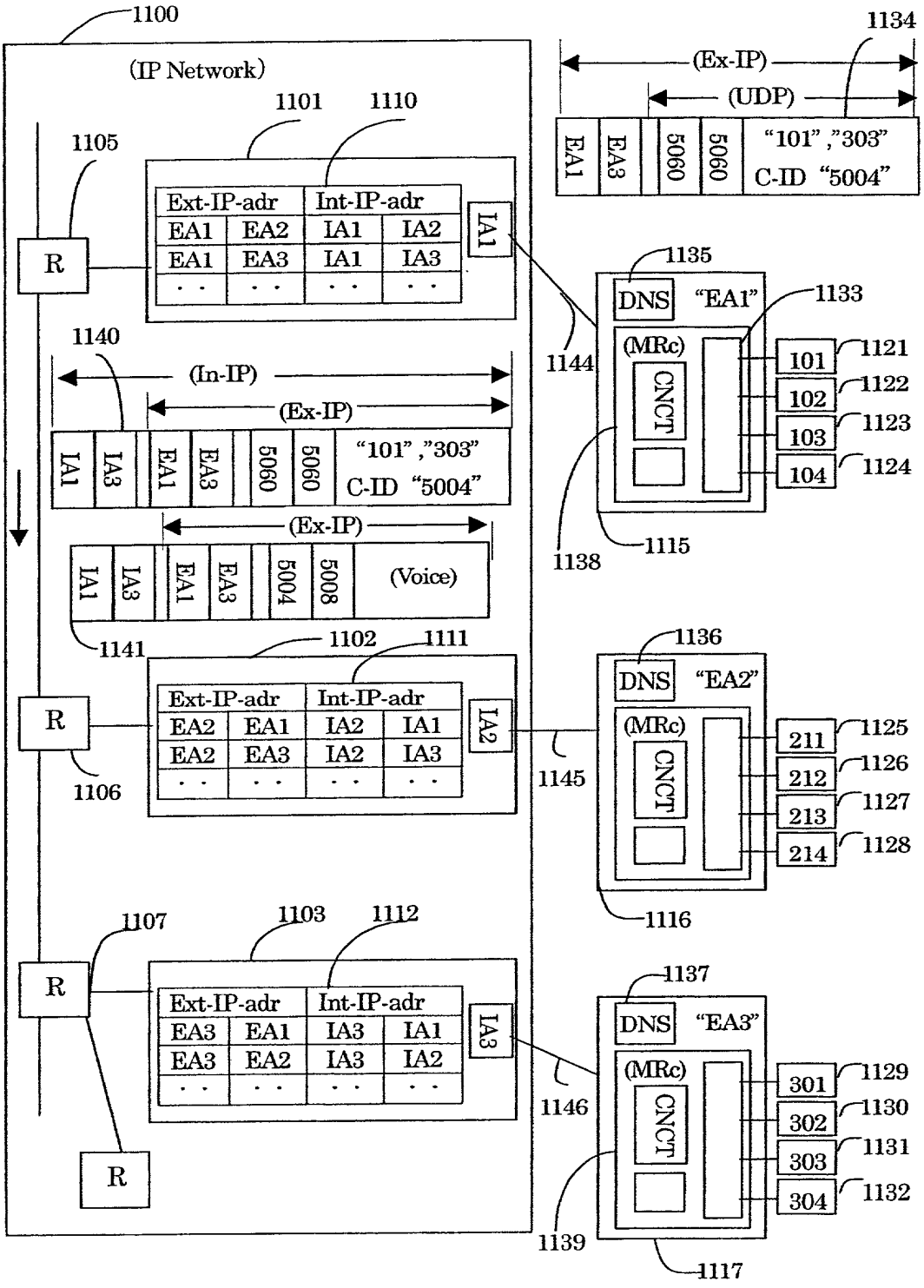

1100
(IP Network)
1101
1110
1105
Ext-IP-adr
Int-IP-adr
EA1
EA2
IA1
IA2
EA1
EA3
IA1
IA3
IA1
R
1140
(In-IP)
(Ex-IP)
IA1
IA3
EA1
EA3
5060
5060
"101","303"
C-ID "5004"
(Ex-IP)
IA1
IA3
EA1
EA3
5004
5008
(Voice)
1141
1102
1111
Ext-IP-adr
Int-IP-adr
EA2
EA1
IA2
IA1
EA2
EA3
IA2
IA3
IA2
R
1106
1107
1103
1112
Ext-IP-adr
Int-IP-adr
EA3
EA1
IA3
IA1
EA3
EA2
IA3
IA2
IA3
R
1134
(Ex-IP)
(UDP)
EA1
EA3
5060
5060
"101","303"
C-ID "5004"
1135
DNS
"EA1"
1133
(MRc)
CNCT
101
102
103
104
1121
1122
1123
1124
1144
1138
1115
1136
DNS
"EA2"
(MRc)
CNCT
211
212
213
214
1125
1126
1127
1128
1145
1116
1137
DNS
"EA3"
(MRc)
CNCT
301
302
303
304
1129
1130
1131
1132
1146
1139
1117

FIG.137

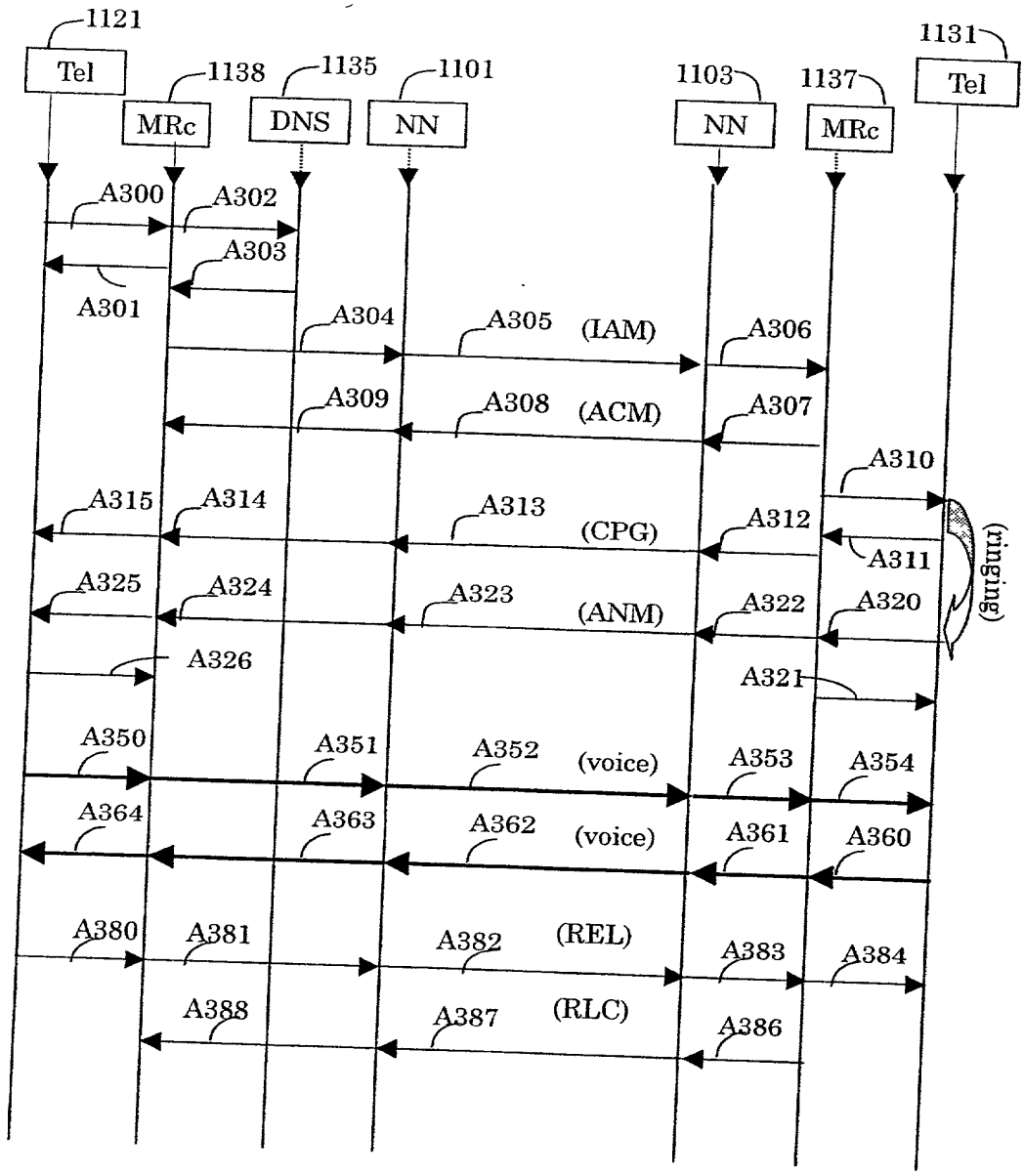

1121
Tel
1138
MRc
1135
DNS
1101
NN
1103
NN
1137
MRc
1131
Tel
A300
A302
A303
A301
A304
A305
(IAM)
A306
A309
A308
(ACM)
A307
A310
A315
A314
A313
(CPG)
A312
A311
(ringing)
A325
A324
A323
(ANM)
A322
A320
A326
A321
A350
A351
A352
(voice)
A353
A354
A364
A363
A362
(voice)
A361
A360
A380
A381
A382
(REL)
A383
A384
A388
A387
(RLC)
A386

FIG.138

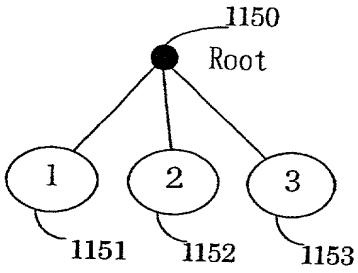


FIG.139

1155

Telephone Number	Domain Name Expression of Telephone No.
1 × ×	1.
2 × ×	2.
3 × ×	3.

FIG.140

1156

Question to Telephone Number Server		Contents of Answer
Question	1.	EA1
	2.	EA2
	3.	EA3

FIG.141

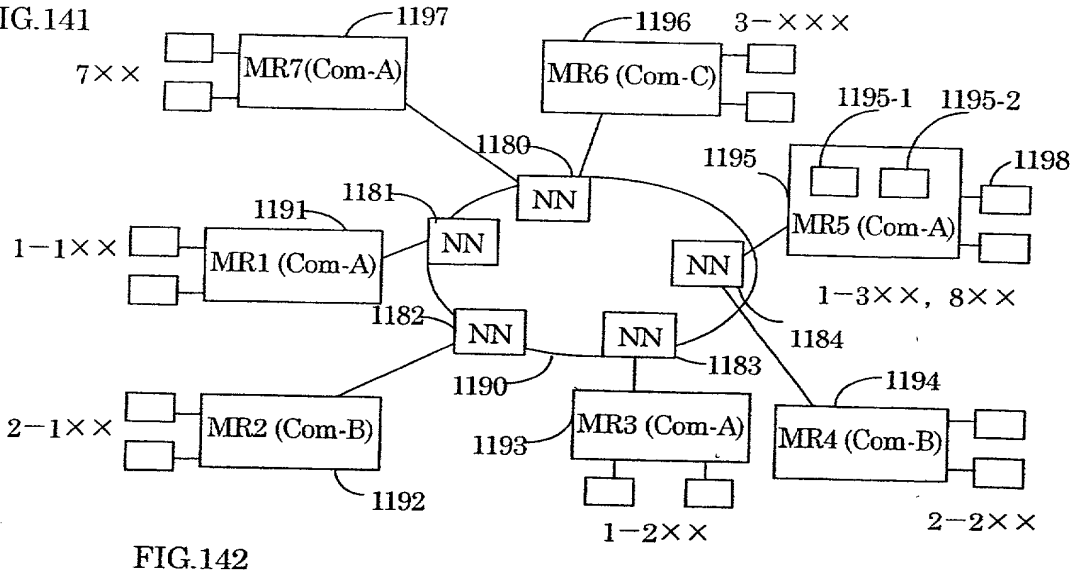


FIG.142

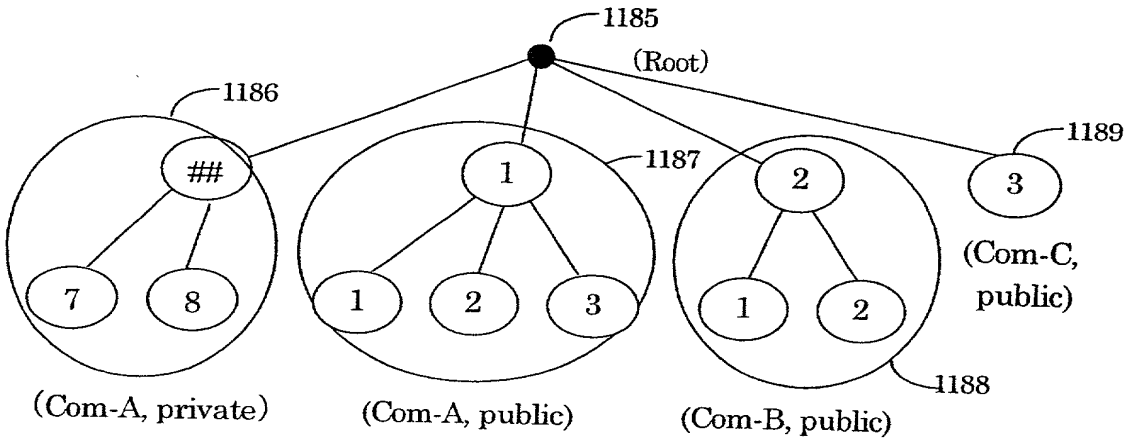


FIG.143

1185-1

Telephone Number	Domain Name Expression of Telephone No.
1−1××	1. 1.
1−2××	2. 1.
1−3××	3. 1.
2−1××	1. 2.
2−2××	2. 2.
3−×××	3.
7××	7. #.
8××	8. #.

FIG.144

1185-2

Question to Telephone No. Server	Contents of Answer
1. 1.	IP Address of MR1
2. 1.	IP Address of MR3
3. 1.	IP Address of MR5
1. 2.	IP Address of MR2
2. 2.	IP Address of MR4
3.	IP Address of MR6
7. ##.	IP Address of MR7
8. ##.	IP Address of MR5

TOZ280 ZS2Z8860

FIG.145

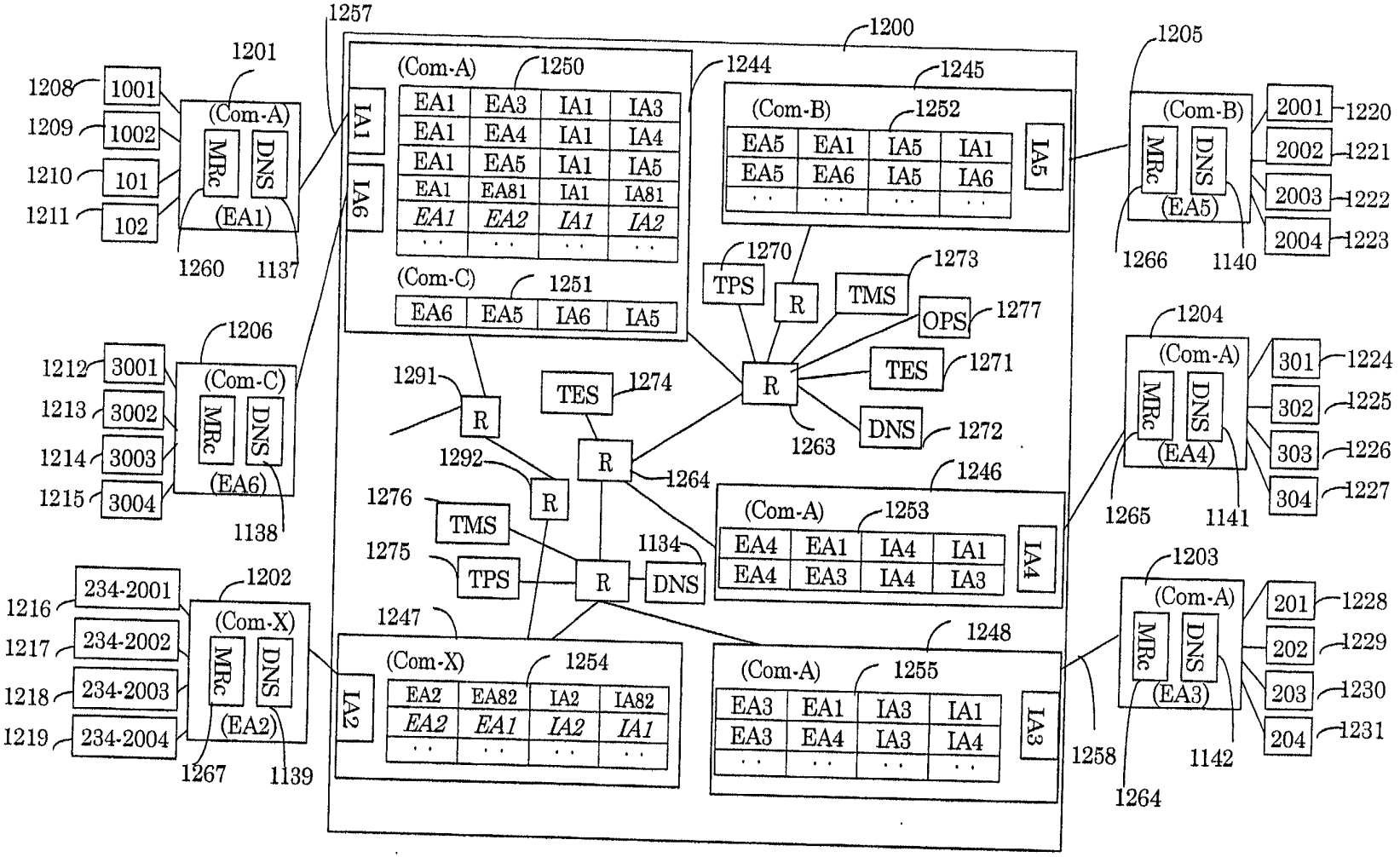


FIG.146

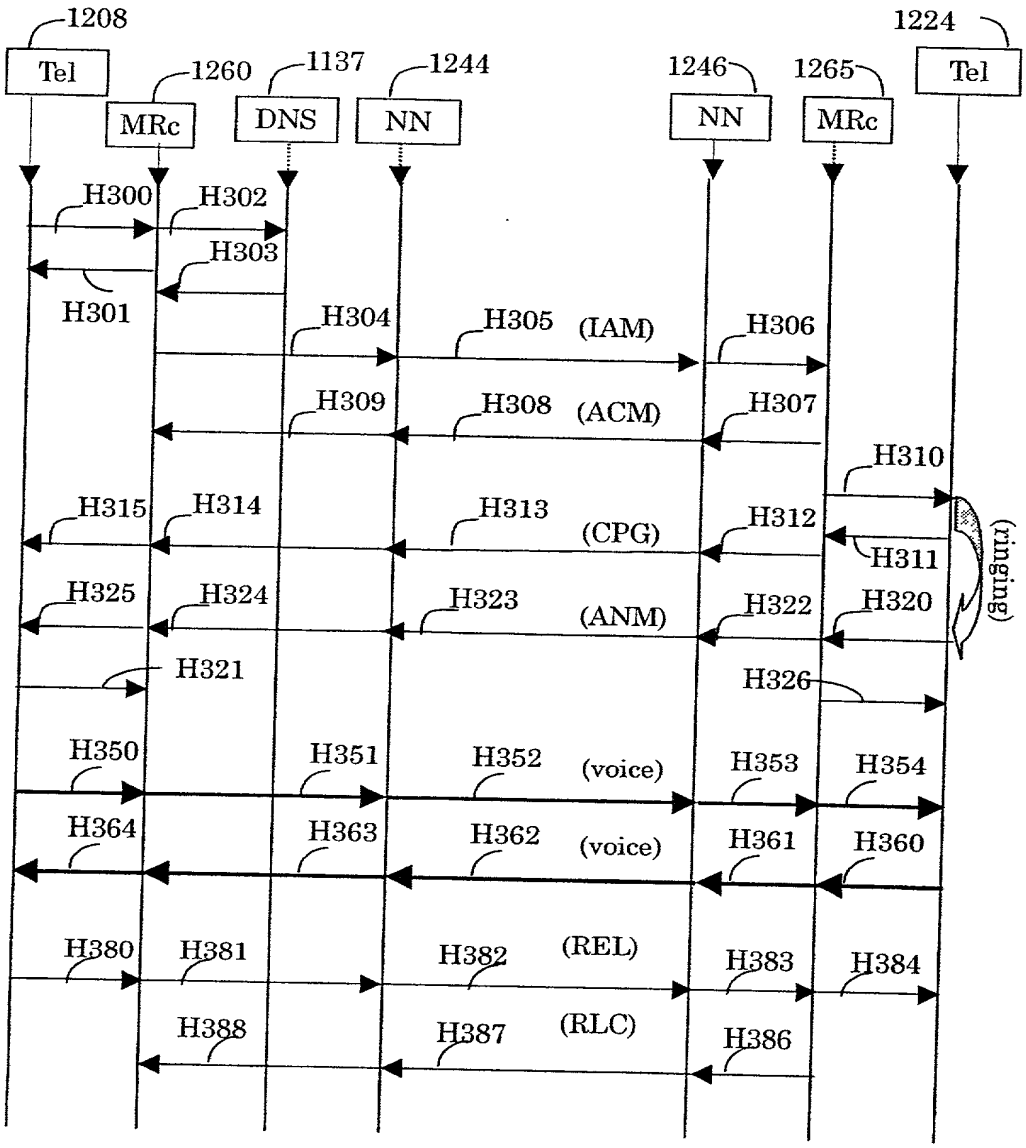

1208
Tel
1260
MRc
1137
DNS
1244
NN
1246
NN
1265
MRc
1224
Tel
H300
H302
H303
H301
H304
H305
(IAM)
H306
H309
H308
(ACM)
H307
H310
H315
H314
H313
(CPG)
H312
H311
ringing
H325
H324
H323
(ANM)
H322
H320
H321
H326
H350
H351
H352
(voice)
H353
H354
H364
H363
H362
(voice)
H361
H360
H380
H381
H382
(REL)
H383
H384
H388
H387
(RLC)
H386

FIG.147

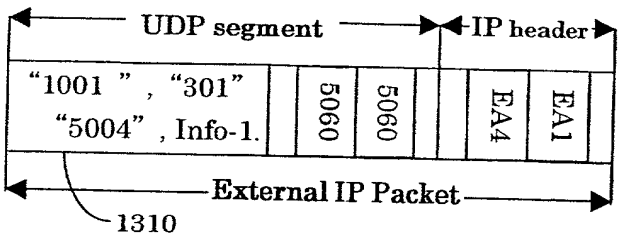


FIG.148

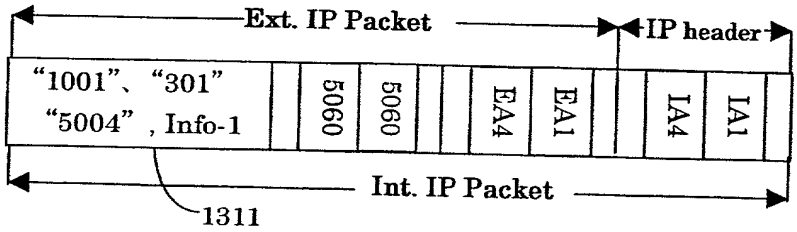


FIG.149

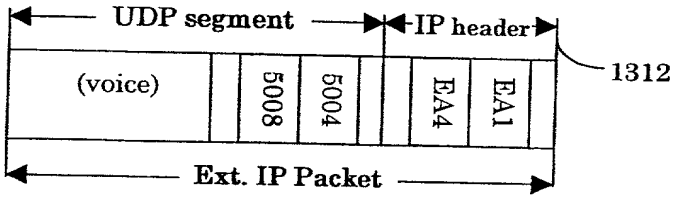
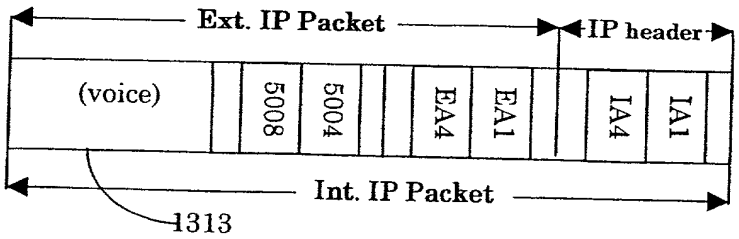


FIG.150



TO2280 "2927660

FIG.151

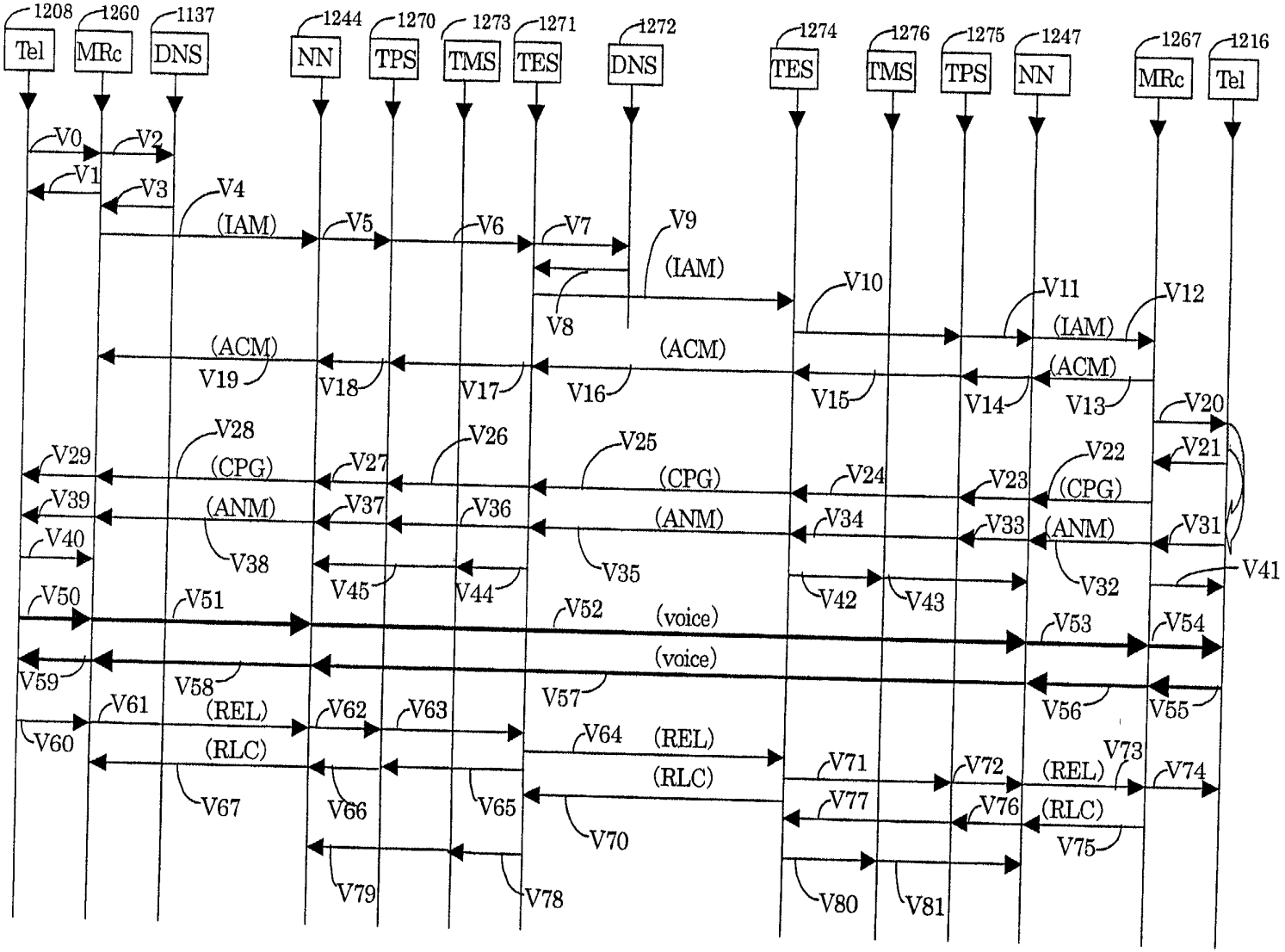


FIG.152

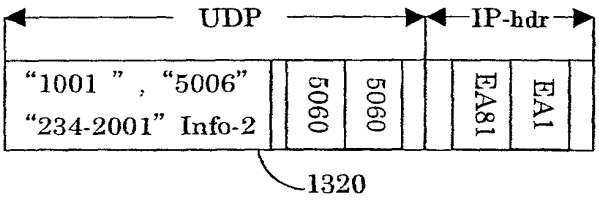


FIG.153

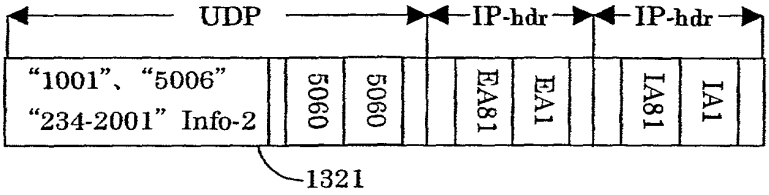


FIG.154

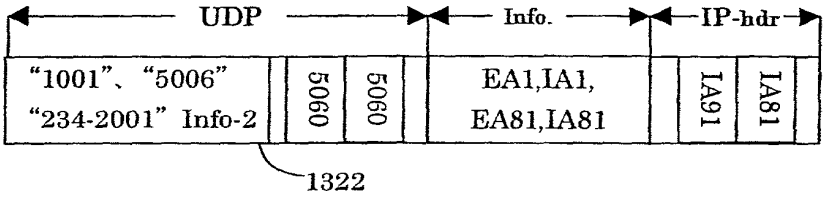


FIG.155

1323

CIC No.	Sender Phone No.	Receiver Phone No.	IP Address	Step	Start Time	End Time
CIC-1	"1004"	"××・・×"	×,×,××・・	ANM	St-1	
CIC-2	"1001"	"234-2001"	EA1,IA1,EA81, IA81,IA91	IAM	St-2	
・・	・・	・・	・・	・・	・・	・・

FIG.156

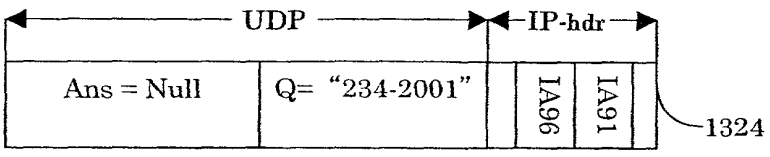


FIG.157

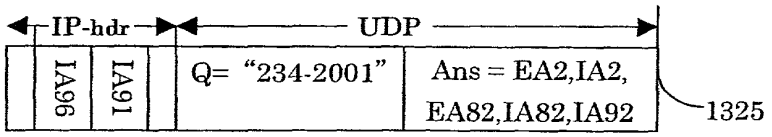


FIG.158

1326-1

CIC No.	Sender Phone No.	Receiver Phone No.	IP Address	Step	Start Time	End Time
CIC-1	"1004"	"××"	×,×,×× · ·	ANM	St-1	
CIC-2	"1001"	"234-2001"	EA1,IA1,EA81,IA 81,IA91,EA2,IA2, EA82,IA82,IA92	IAM	St-2	
· ·	· ·	· ·	· ·	· ·	· ·	· ·

FIG.159

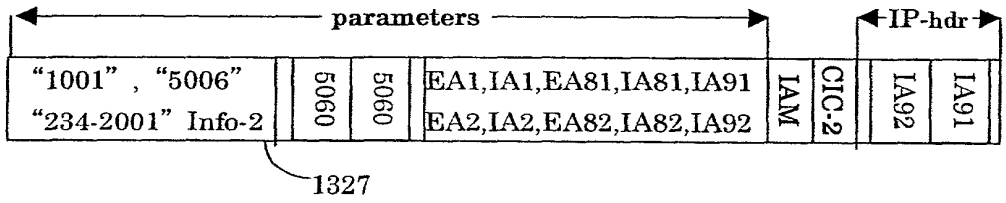


FIG.160

1326-2

CIC No.	Sender Phone No.	Receiver Phone No.	IP Address	Step	Start Time	End Time
CIC-2	"1001"	"234-2001"	EA1,IA1,EA81,IA 81,IA91,EA2,IA2, EA82,IA82,IA92	IAM	St-3	
· ·	· ·	· ·	· ·	· ·	· ·	· ·

FIG.161

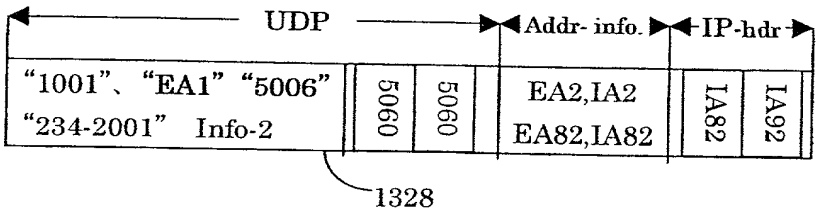


FIG.162

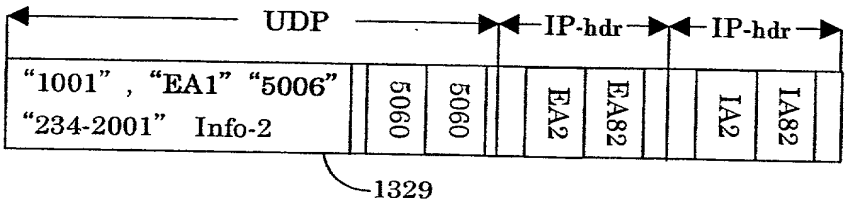


FIG.163

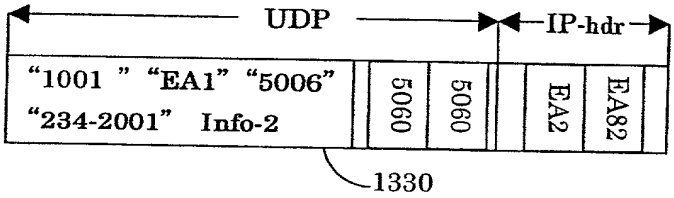


FIG.164

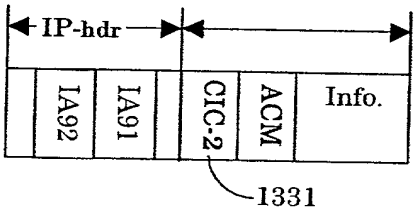


FIG.165

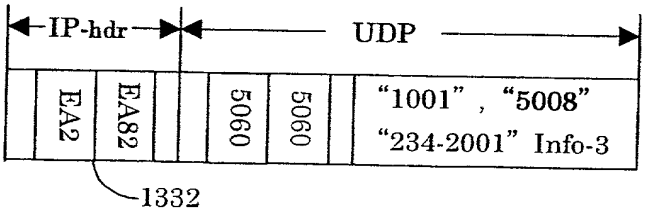


FIG.166

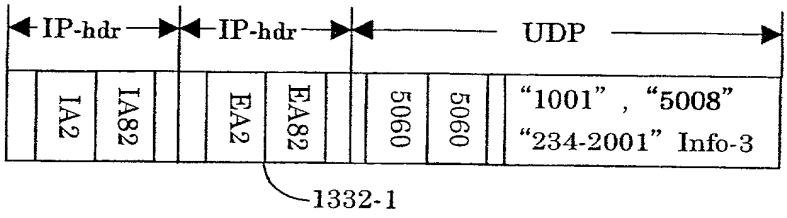


FIG.167

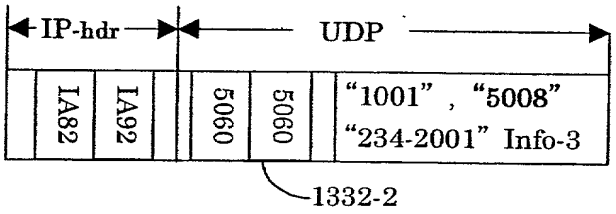


FIG.168

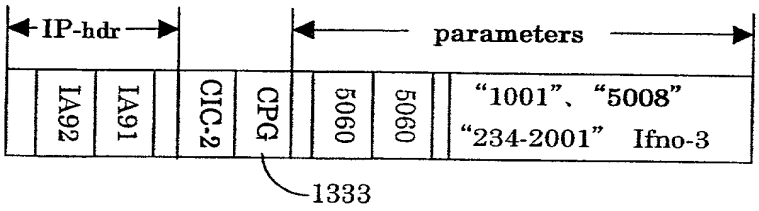


FIG.169

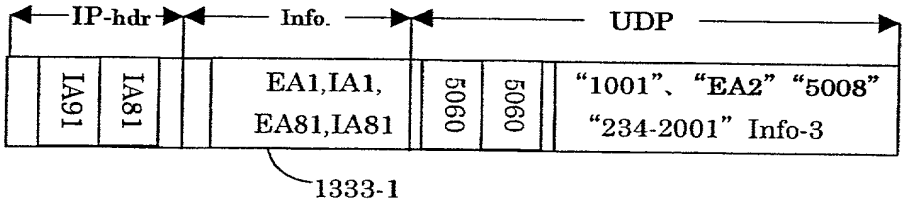


FIG.170

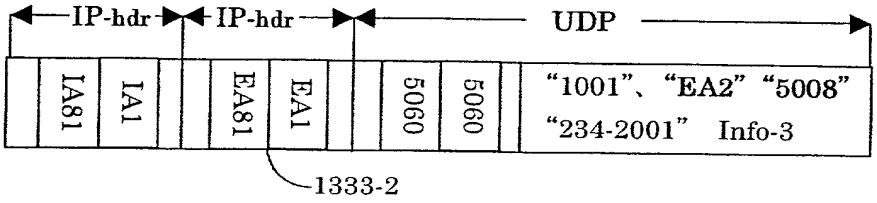


FIG.171

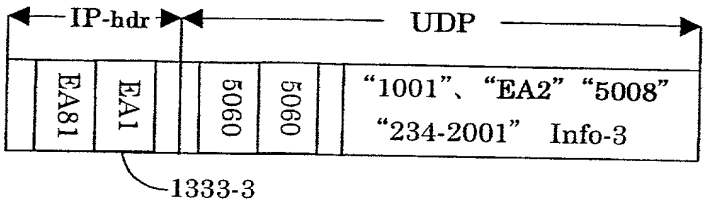


FIG.172

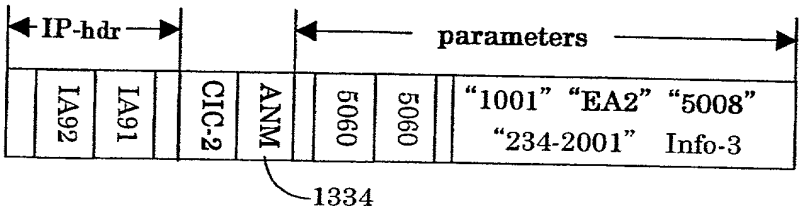


FIG.173

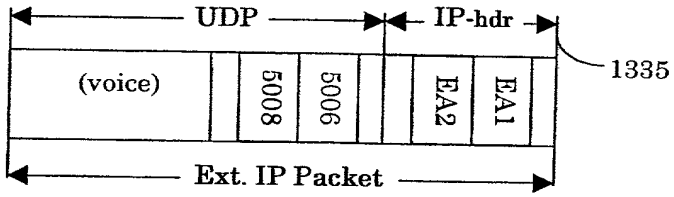


FIG.174

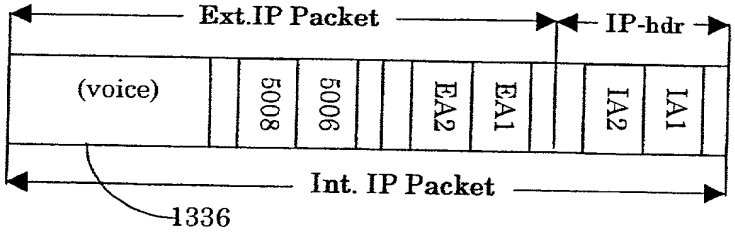


FIG.175

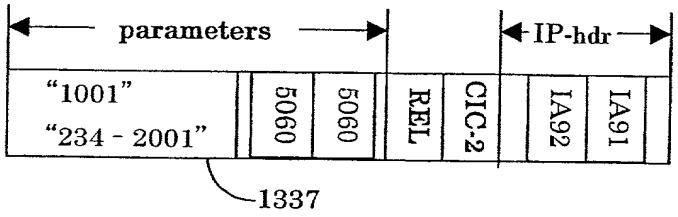


FIG.176

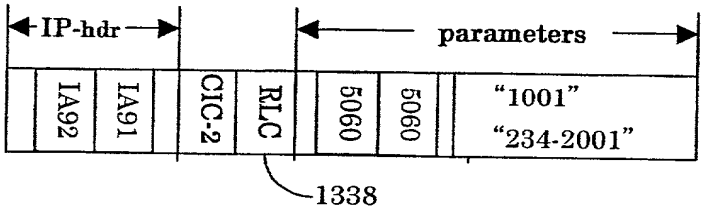


FIG.177

1326−5

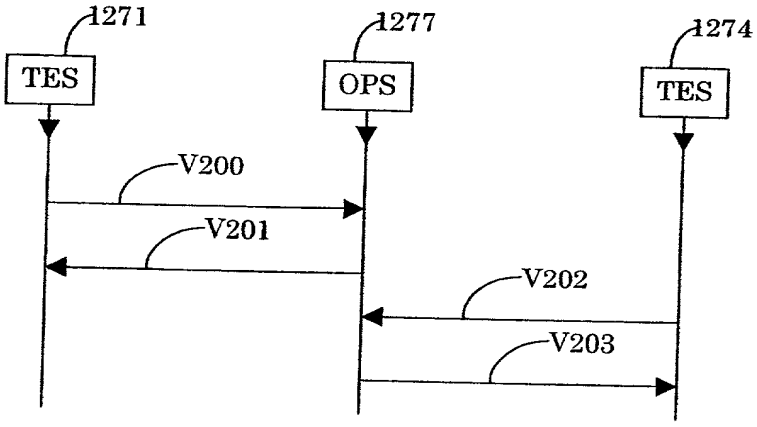
(MR IP Address)	No. of Using Line	Upper Lim.of Line
EA1	2	5
EA6	3	4
. .	. .	. .

FIG.178

1326−6

(MR IP Address)	No. of Using Line	Upper Lim. of Line
EA7	0	3
EA2	2	7
. .	. .	. .

FIG.179



TOKEN: 2922860

FIG.180

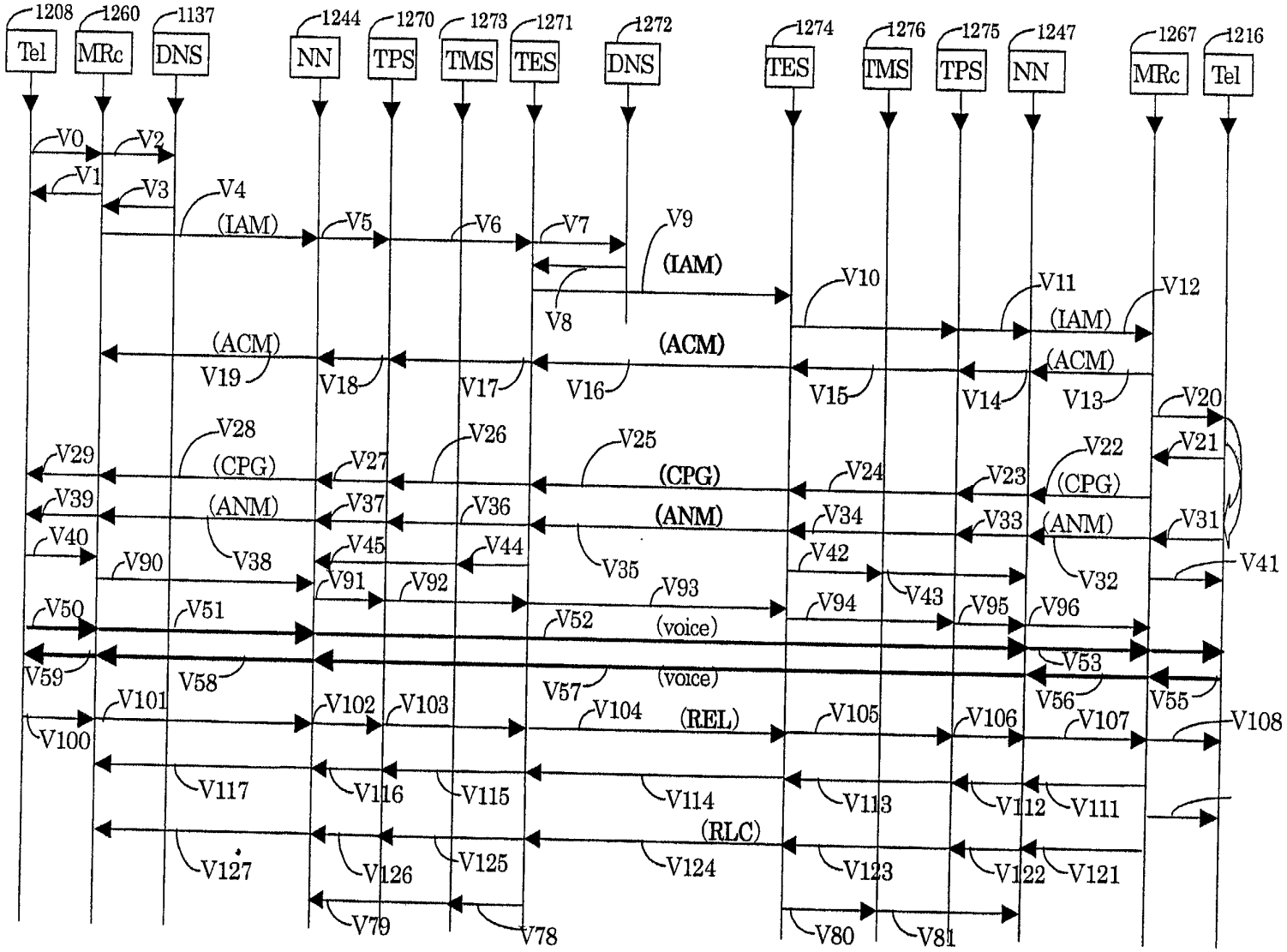


FIG.181

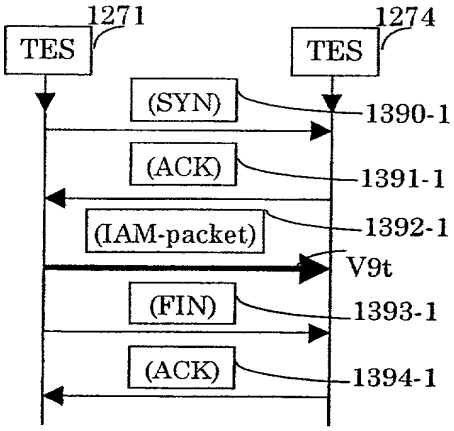


FIG.182

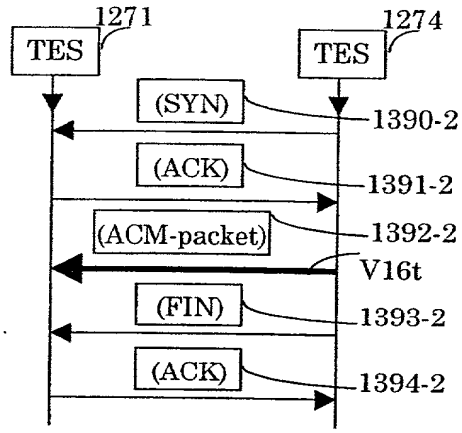


FIG.183

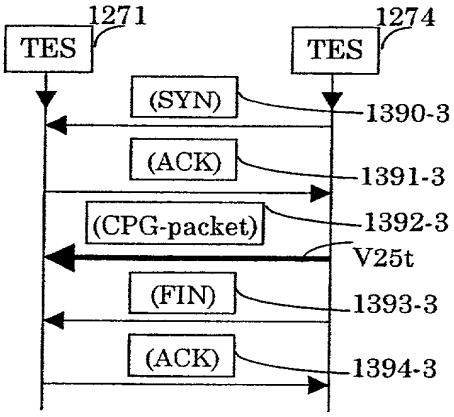


FIG.184

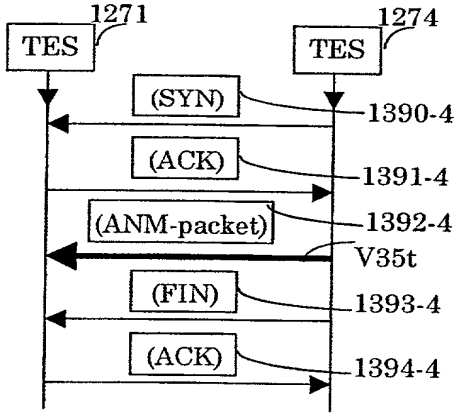


FIG.185

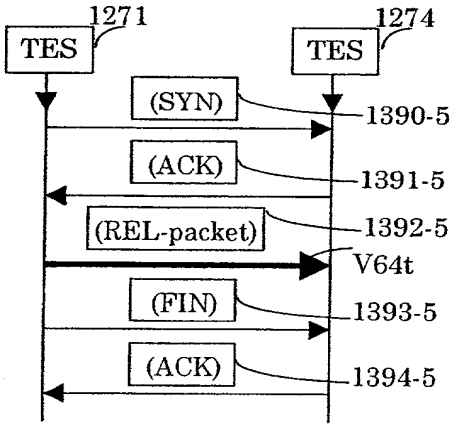


FIG.186

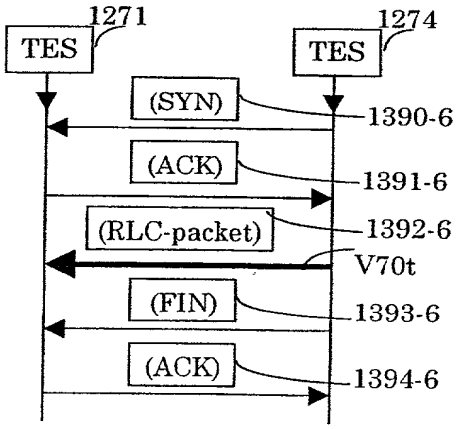


FIG.187

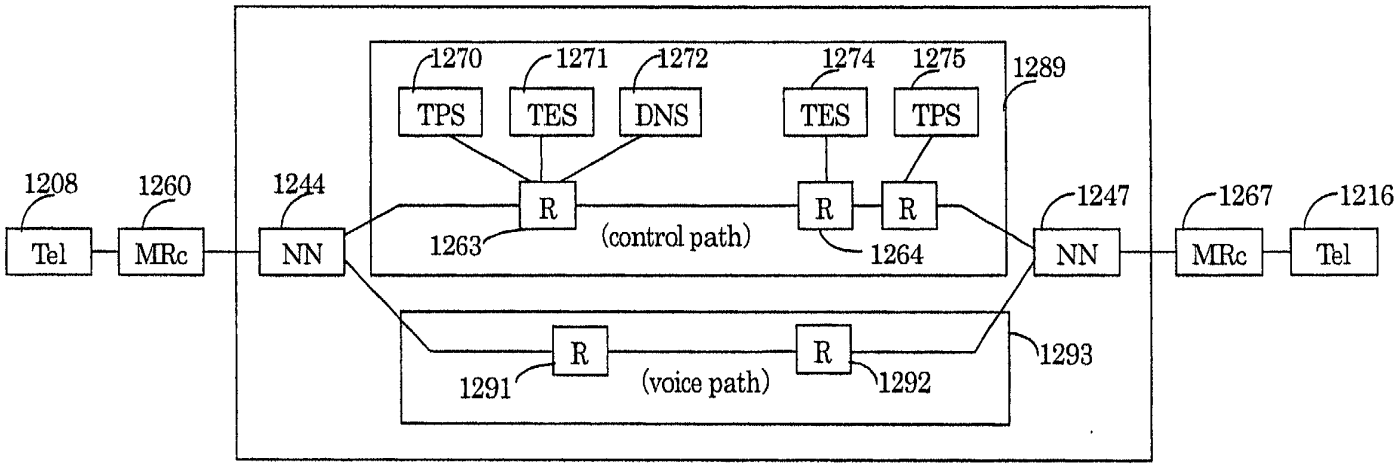

1270
1271
1272
1274
1275
1289
TPS
TES
DNS
TES
TPS
1208
1260
1244
1247
1267
1216
R
R
R
Tel
MRc
NN
1263
(control path)
1264
NN
MRc
Tel
R
R
1293
1291
(voice path)
1292

FIG.188

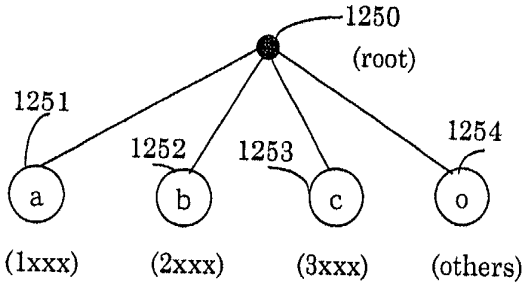


FIG.189

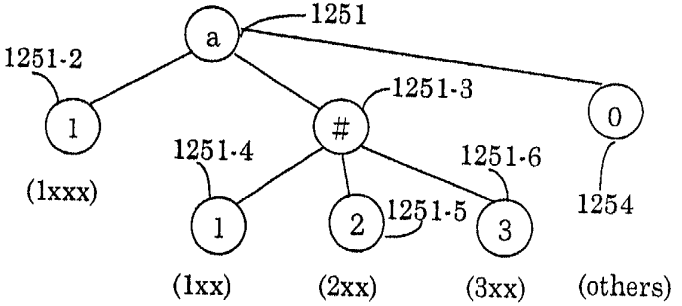


FIG.190

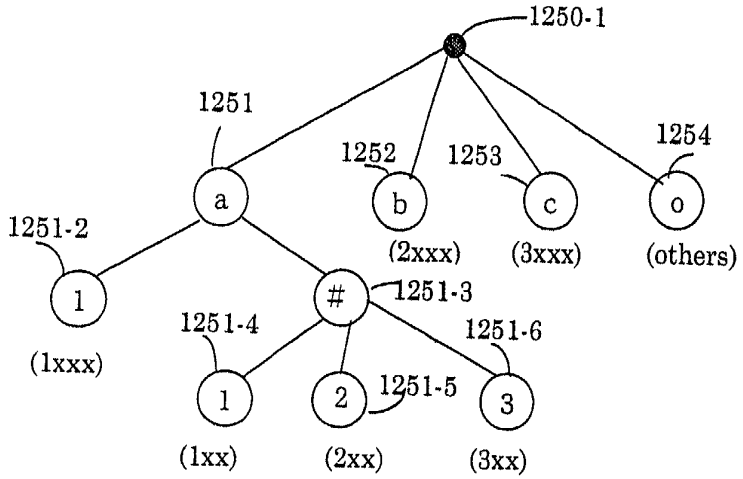


FIG.191

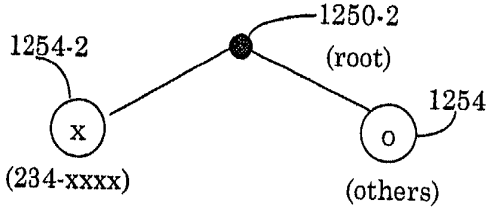


FIG.192

1255-1

Phone No.	Domain Name Expression of Phone No.
1xxx	1.a.
2xxx	b.
3xxx	c.
1xx	1.#.a.
2xx	2.#.a.
3xx	3.#.a.
others	o.

FIG.193

1255-2

Domain Name Expression of Phone No.	IP Address
1.a.	EA1
b.	EA5
c.	EA6
1.#.a.	EA1
2.#.a.	EA3
3.#.a.	EA4
o.	EA81

FIG.194

1256-1

Phone No.	Domain Name Expression of Phone No.
1xxx	1.a.
1xx	1.#.a.
2xx	2.#.a.
3xx	3.#.a.
others	o.

FIG.195

1256-2

Domain Name Expression of Phone No.	IP Address
1.a.	EA1
1.#.a.	EA1
2.#.a.	EA3
3.#.a.	EA4
o.	EA81

FIG.196

1257-1

Phone No.	Domain Name Expession of Phone No.
1xxx	a.
2xxx	b.
3xxx	c.
others	o.

FIG.197

1257-2

Domain Name Expression of Phone No.	IP Address
a.	EA1
b.	EA5
c.	EA6
o.	EA81

TO:2801 292:2860

FIG.198

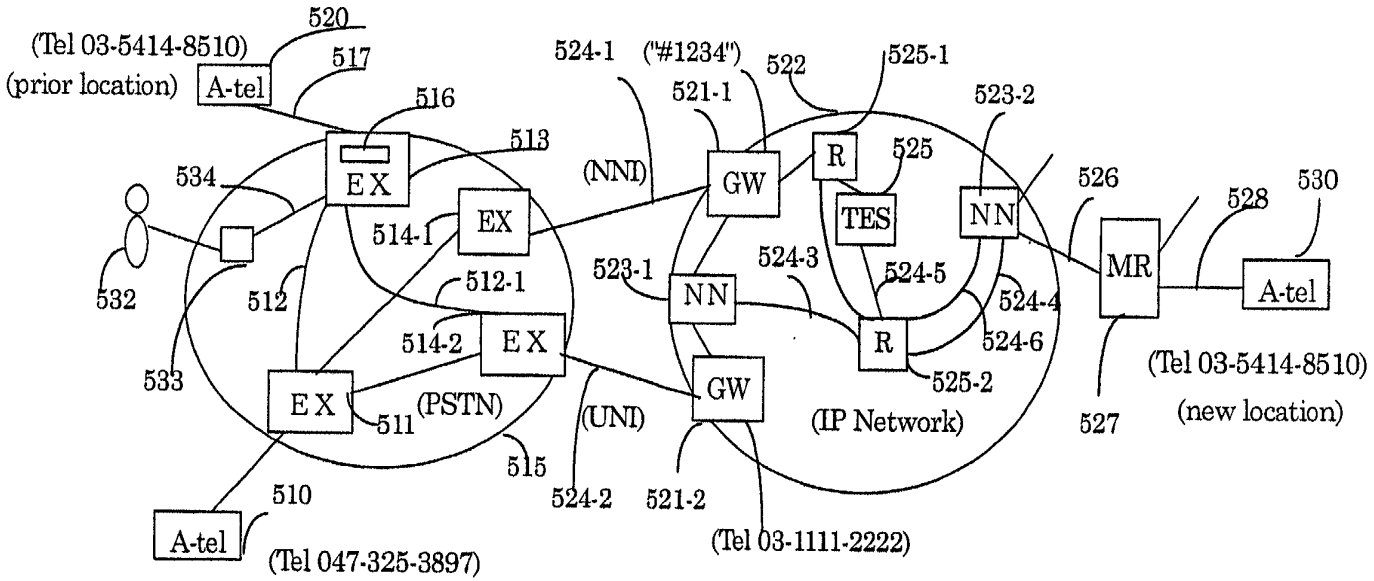


FIG.199

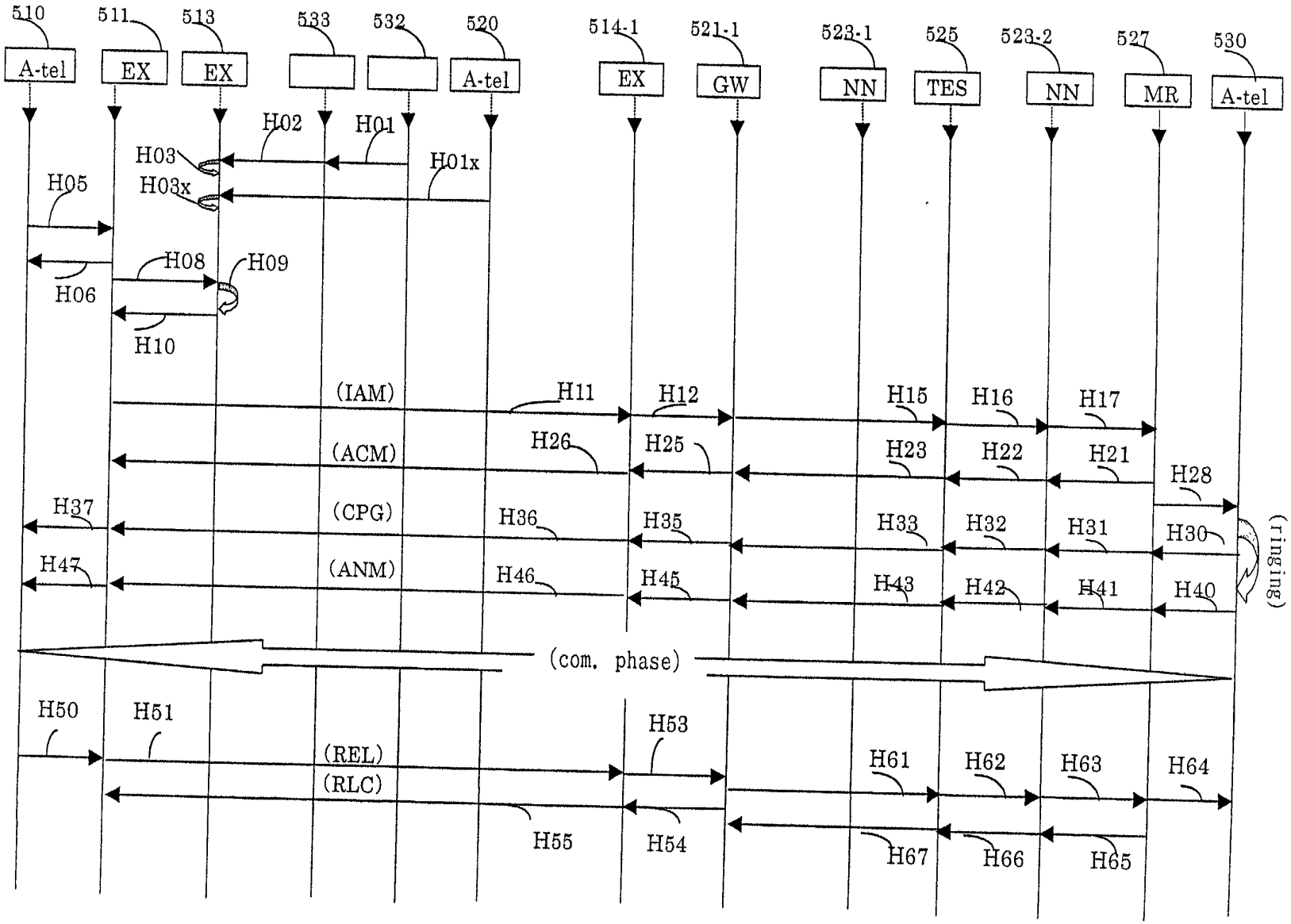

510
511
513
533
532
520
514-1
521-1
523-1
525
523-2
527
530
A-tel
EX
EX
A-tel
EX
GW
NN
TES
NN
MR
A-tel
H02
H01
H03
H01x
H03x
H05
H08
H09
H06
H10
(IAM)
H11
H12
H15
H16
H17
H26
H25
H23
H22
H21
(ACM)
H28
H37
(CPG)
H36
H35
H33
H32
H31
H30
(ringing)
H47
(ANM)
H46
H45
H43
H42
H41
H40
(com. phase)
H50
H51
H53
(REL)
H61
H62
H63
H64
(RLC)
H55
H54
H67
H66
H65

FIG.200

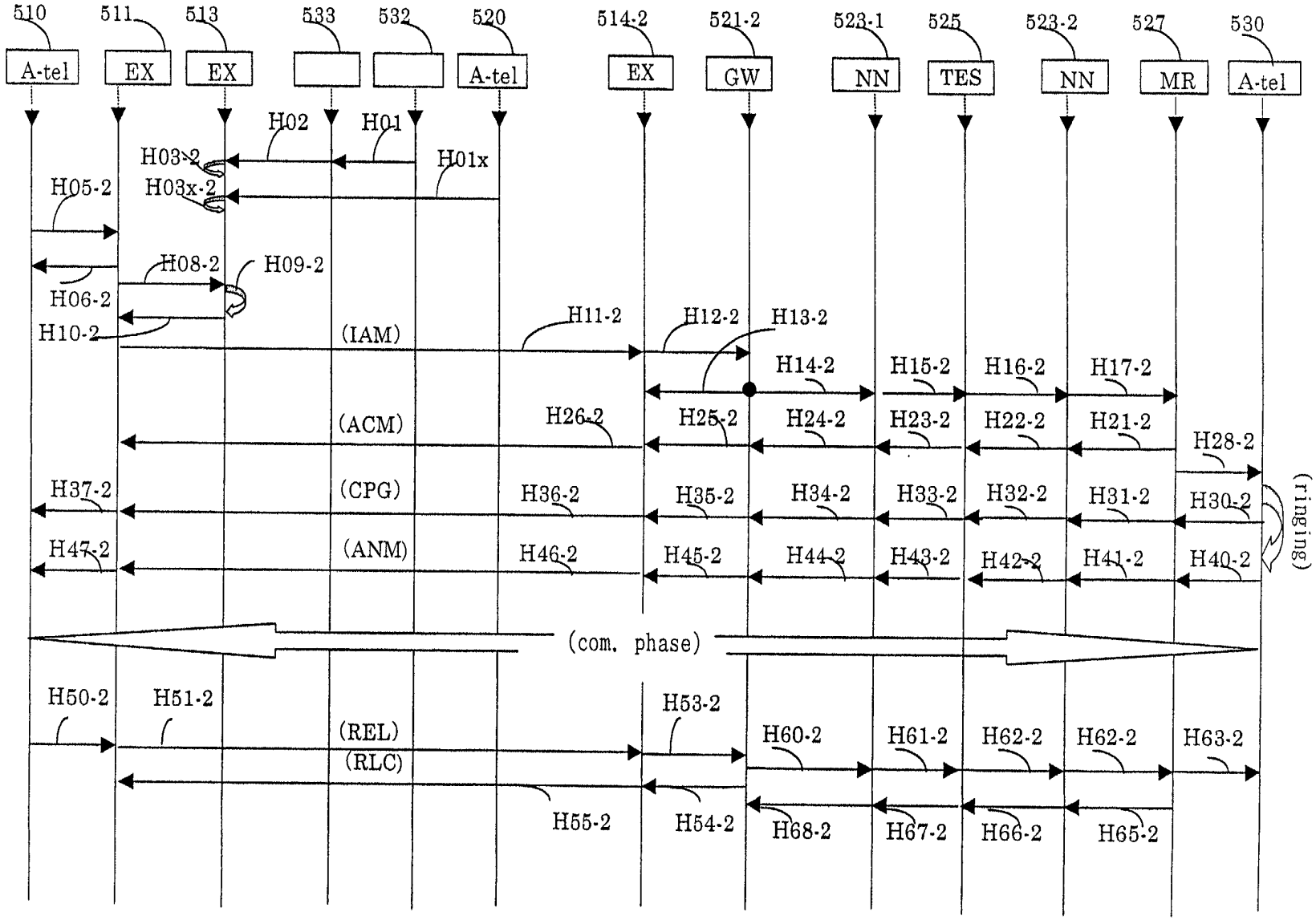
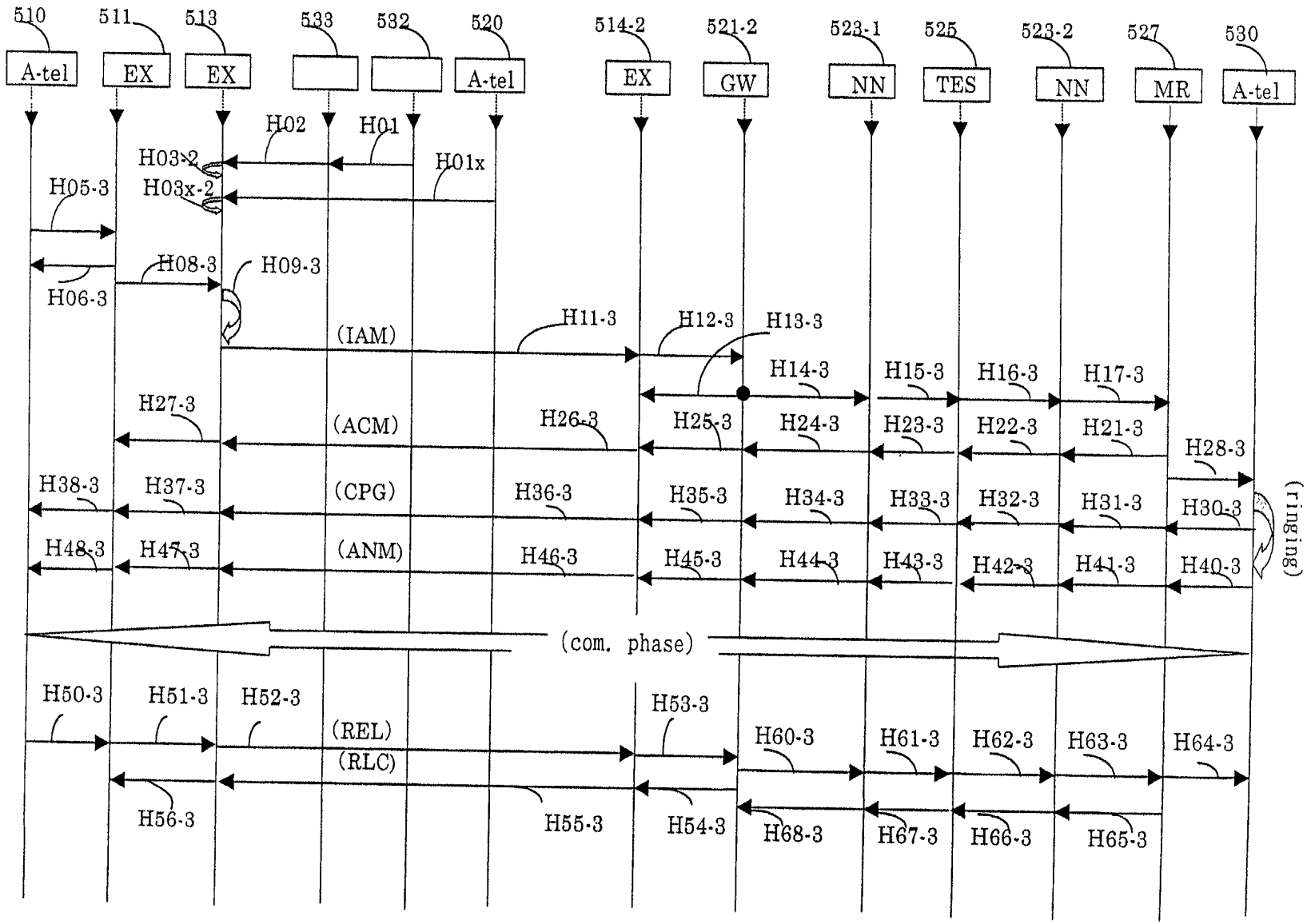

510
511
513
533
532
520
514-2
521-2
523-1
525
523-2
527
530
A-tel
EX
EX
A-tel
EX
GW
NN
TES
NN
MR
A-tel
H02
H01
H03-2
H01x
H05-2
H03x-2
H08-2
H09-2
H06-2
H10-2
(IAM)
H11-2
H12-2
H13-2
H14-2
H15-2
H16-2
H17-2
(ACM)
H26-2
H25-2
H24-2
H23-2
H22-2
H21-2
H28-2
(ringing)
H37-2
(CPG)
H36-2
H35-2
H34-2
H33-2
H32-2
H31-2
H30-2
H47-2
(ANM)
H46-2
H45-2
H44-2
H43-2
H42-2
H41-2
H40-2
(com. phase)
H50-2
H51-2
H53-2
(REL)
(RLC)
H60-2
H61-2
H62-2
H62-2
H63-2
H55-2
H54-2
H68-2
H67-2
H66-2
H65-2

FIG.201


510
511
513
533
532
520
514-2
521-2
523-1
525
523-2
527
530
A-tel
EX
EX
A-tel
EX
GW
NN
TES
NN
MR
A-tel
H02
H01
H03-2
H01x
H05-3
H03x-2
H08-3
H09-3
H06-3
(IAM)
H11-3
H12-3
H13-3
H14-3
H15-3
H16-3
H17-3
H27-3
(ACM)
H26-3
H25-3
H24-3
H23-3
H22-3
H21-3
H28-3
H38-3
H37-3
(CPG)
H36-3
H35-3
H34-3
H33-3
H32-3
H31-3
H30-3
(ringing)
H48-3
H47-3
(ANM)
H46-3
H45-3
H44-3
H43-3
H42-3
H41-3
H40-3
(com. phase)
H50-3
H51-3
H52-3
(REL)
H53-3
H60-3
H61-3
H62-3
H63-3
H64-3
(RLC)
H56-3
H55-3
H54-3
H68-3
H67-3
H66-3
H65-3

JP 2002-232860 A 2002.8.16

FIG.202

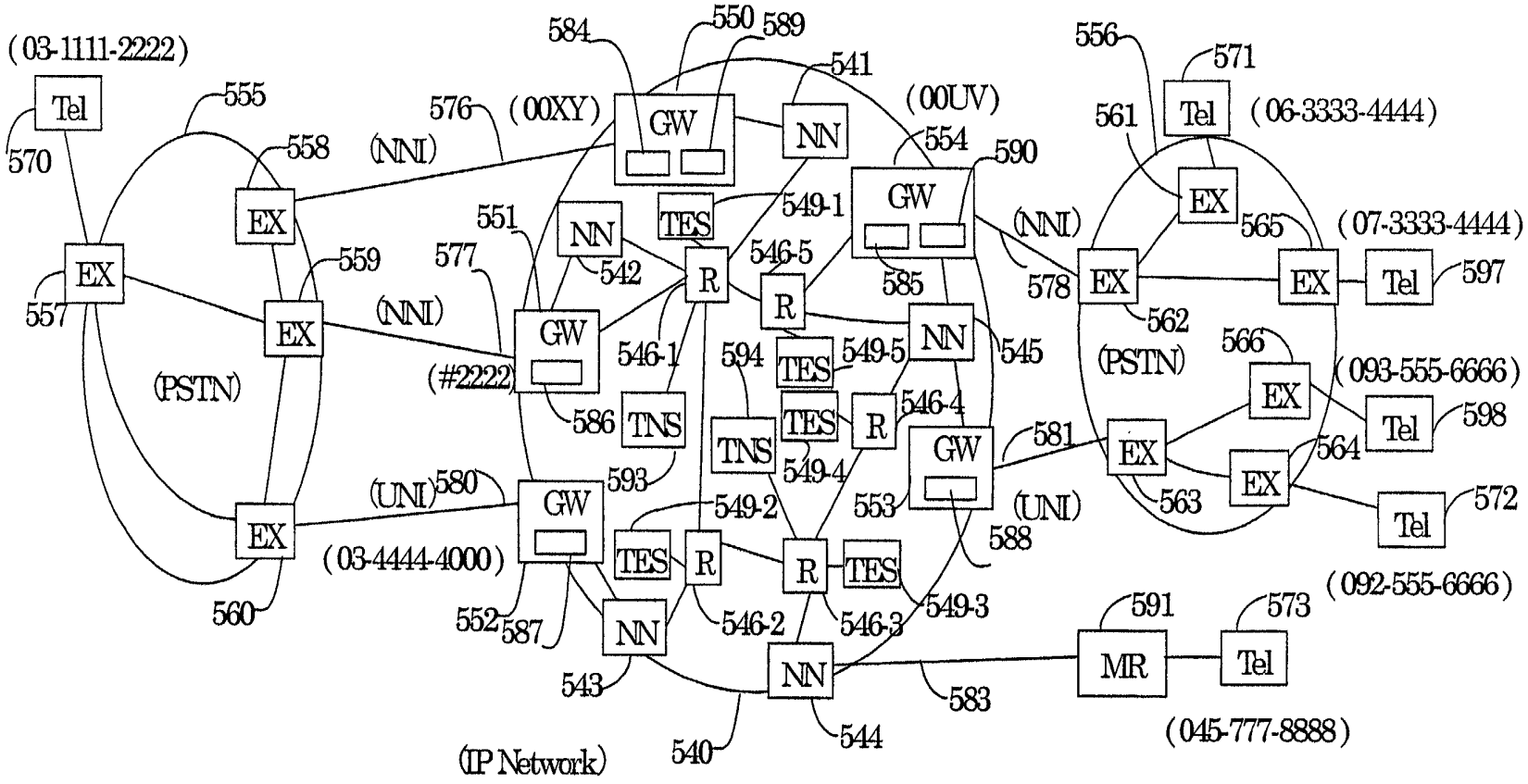


FIG.203

Range of Receiver Phone No.	Division	Phone No. of Input GW (584)	Sig. Pt. Code of Input GW
06-0000-0000～06-9999-9999	NNI		#2222
092-000-0000～092-999-9999	UNI	03-4444-4000～ 03-4444-4099	
045-777-8880～045-777-8890	UNI	03-4444-4000～ 03-4444-4099	
07-0000-0000～07-9999-9999	UNI	03-4444-4000～ 03-4444-4099	
093-000-0000～093-999-9999	NNI		#2222
. .		. .	. .

hex-decimal

FIG.204

Range of Sender Phone No.	Information of Output Line (IP Add. Range of Output GW/MR) (586)
06-0000-0000～06-9999-9999	10.240.240.1～10.240.240.255
092-000-0000～092-999-9999	10.240.241.1～10.240.241.31
045-777-8880～045-777-8890	10.241.1.1 ～ 10.241.1.3
07-0000-0000～07-9999-9999	10.240.240.1～10.240.240.255
093-000-0000～093-999-9999	10.240.241.1～10.240.241.31
. .	. .

JP2280"2922860

FIG.205

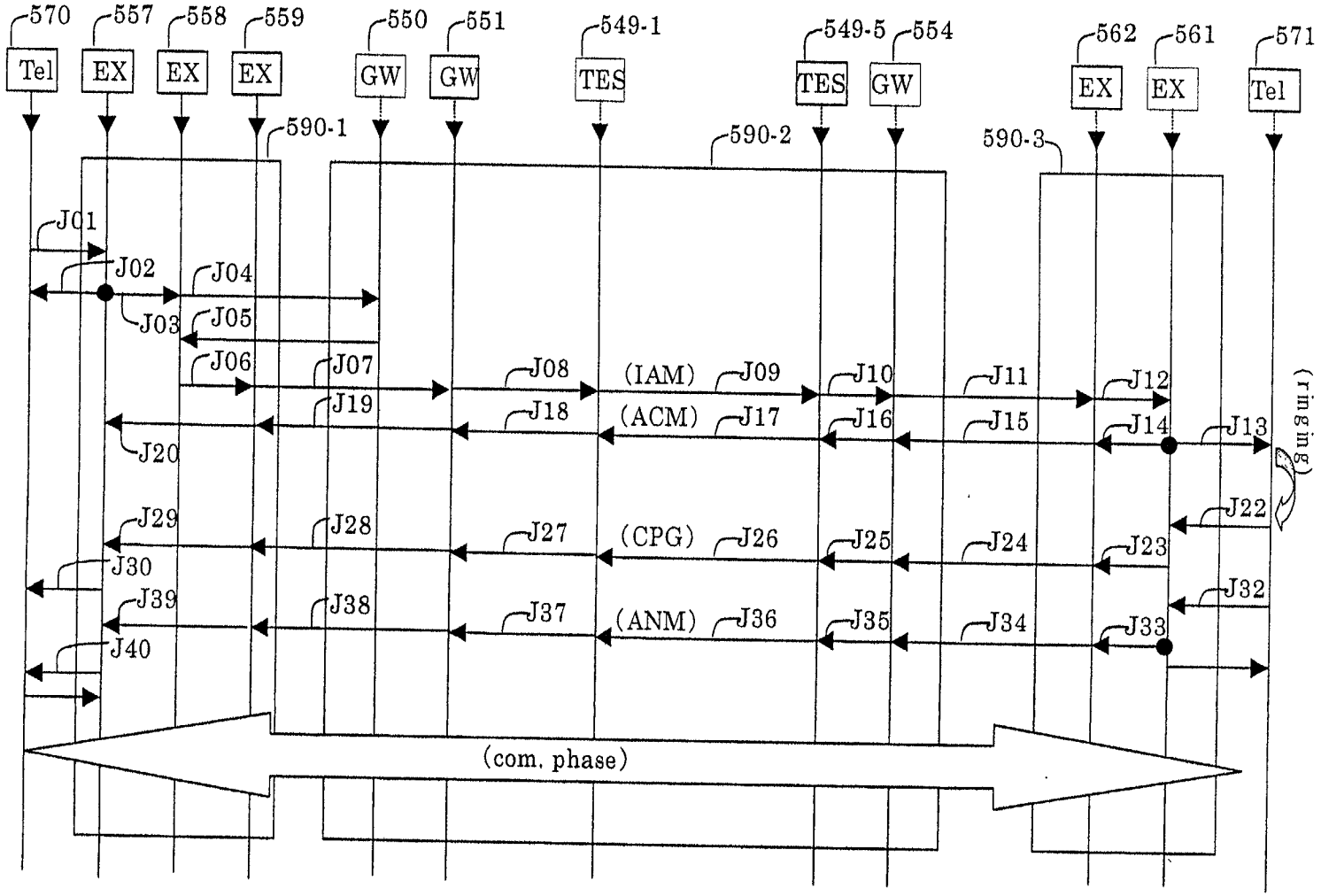


FIG.206

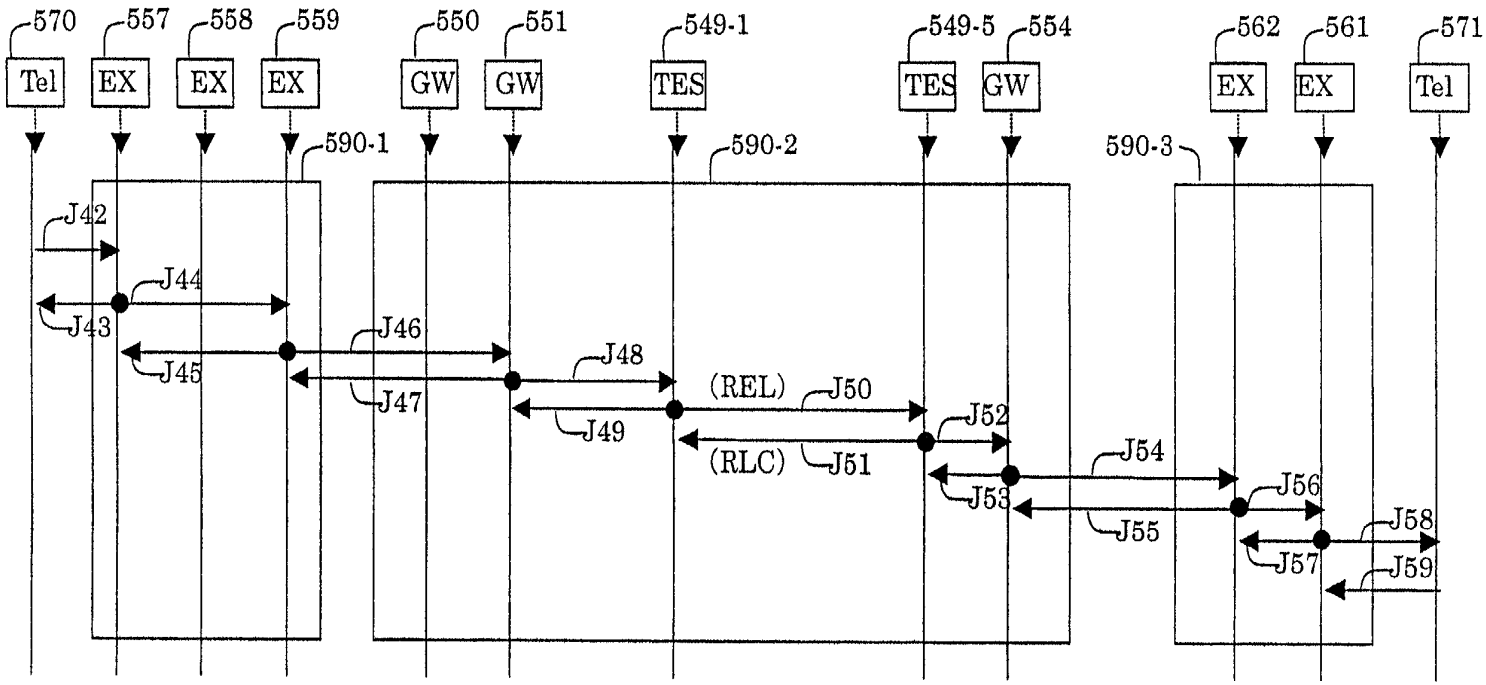
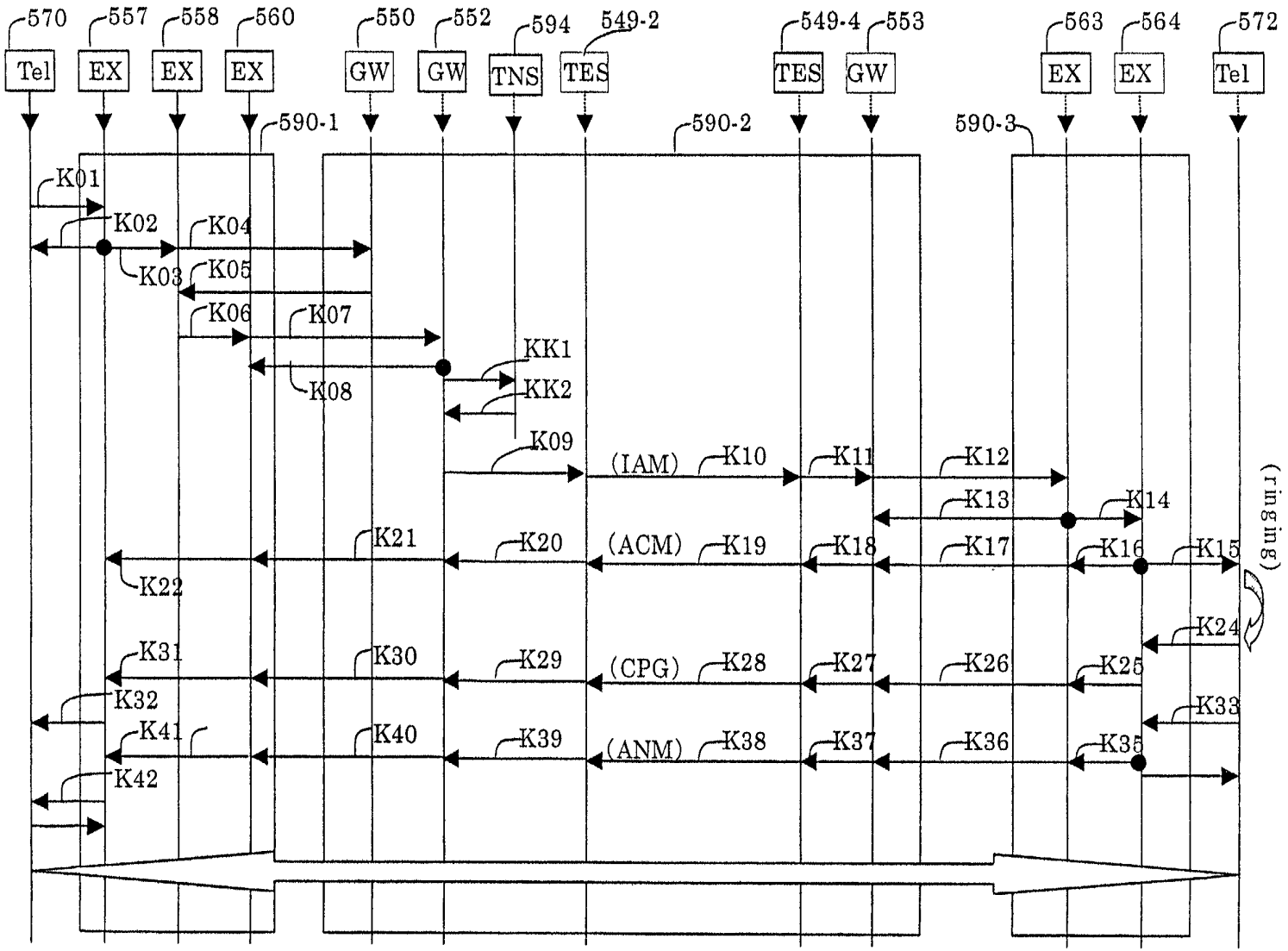

570
557
558
559
550
551
549-1
549-5
554
562
561
571
Tel
EX
EX
EX
GW
GW
TES
TES
GW
EX
EX
Tel
590-1
590-2
590-3
J42
J44
J43
J46
J48
J45
(REL)
J50
J47
J52
J49
(RLC)
J51
J54
J56
J53
J58
J55
J57
J59

FIG.207


570
557
558
560
550
552
594
549-2
549-4
553
563
564
572
Tel
EX
EX
EX
GW
GW
TNS
TES
TES
GW
EX
EX
Tel
590-1
590-2
590-3
K01
K02
K03
K04
K05
K06
K07
K08
KK1
KK2
K09
(IAM)
K10
K11
K12
K13
K14
K15
K16
K17
K18
K19
(ACM)
K20
K21
K22
K24
K25
K26
K27
K28
(CPG)
K29
K30
K31
K32
K33
K35
K36
K37
K38
(ANM)
K39
K40
K41
K42
(ringing)

TOZ280 29222860

FIG.208

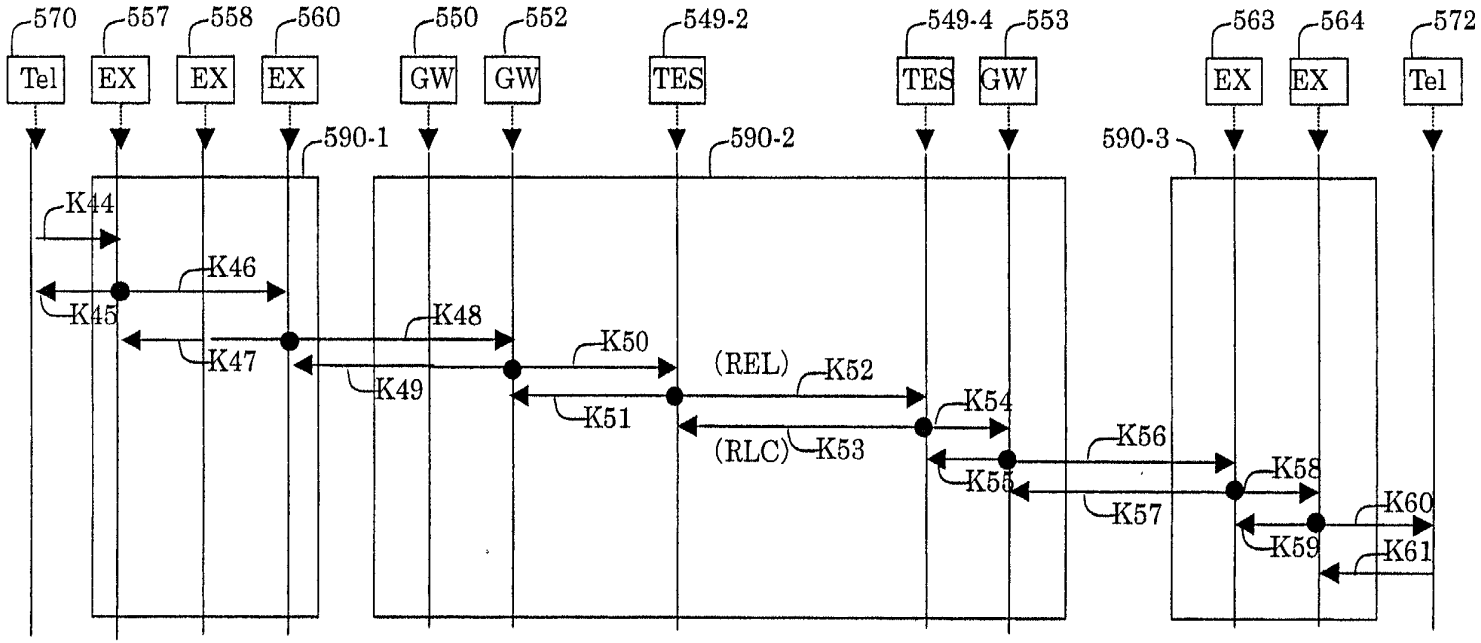


FIG.209

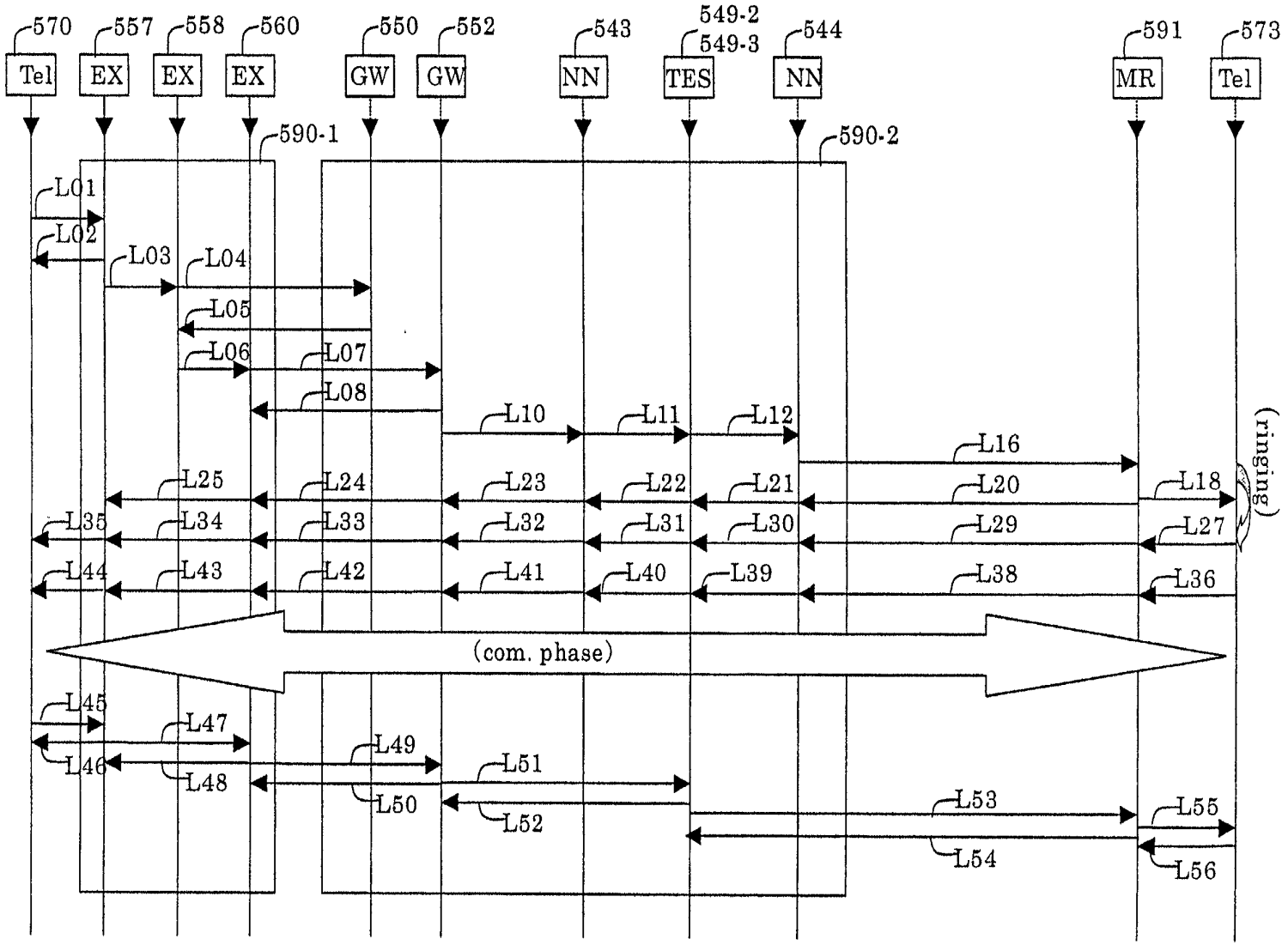

570
Tel
557
EX
558
EX
560
EX
550
GW
552
GW
543
NN
549-2
549-3
TES
544
NN
591
MR
573
Tel
590-1
590-2
L01
L02
L03
L04
L05
L06
L07
L08
L10
L11
L12
L16
L25
L24
L23
L22
L21
L20
L18
L35
L34
L33
L32
L31
L30
L29
L27
L44
L43
L42
L41
L40
L39
L38
L36
(ringing)
(com. phase)
L45
L47
L46
L48
L49
L50
L51
L52
L53
L54
L55
L56

FIG.210

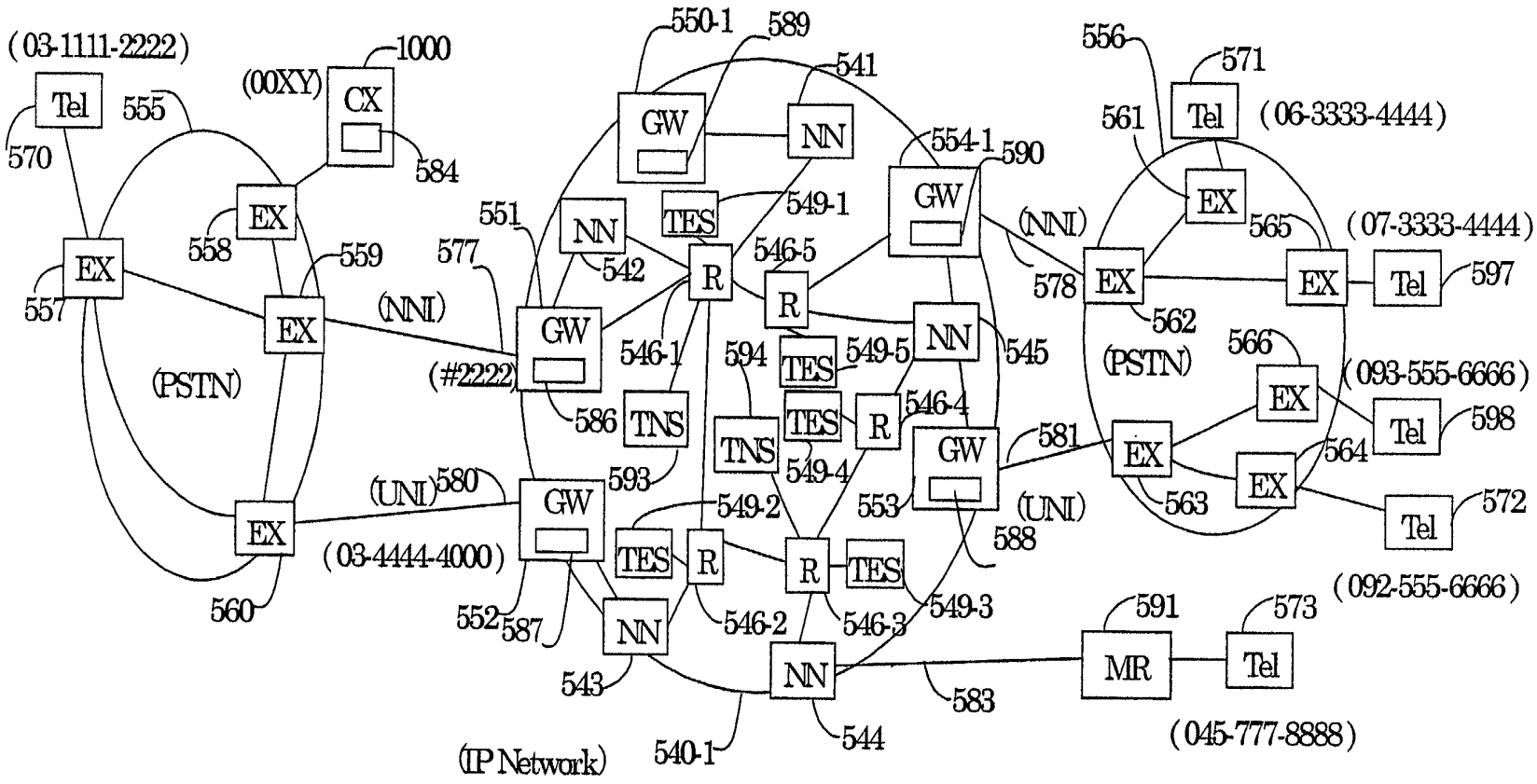

(03-1111-2222)
Tel
570
555
(00XY)
CX
1000
584
EX
558
559
EX
557
EX
(NNI)
(PSTN)
EX
560
(UNI)
580
(03-4444-4000)
GW
(#2222)
586
577
551
NN
542
550-1
589
GW
NN
541
TES
549-1
546-5
R
546-1
TNS
593
TES
549-2
R
546-2
NN
552
587
543
549-4
TNS
R
546-4
TES
549-5
NN
545
GW
553
588
549-3
TES
R
546-3
NN
540-1
544
583
(IP Network)
554-1
590
GW
(NNI)
578
EX
562
(PSTN)
556
561
Tel
571
(06-3333-4444)
EX
565
(07-3333-4444)
EX
Tel
597
566
EX
(093-555-6666)
Tel
598
564
EX
Tel
572
(092-555-6666)
581
EX
563
(UNI)
MR
591
573
Tel
(045-777-8888)

FIG.211

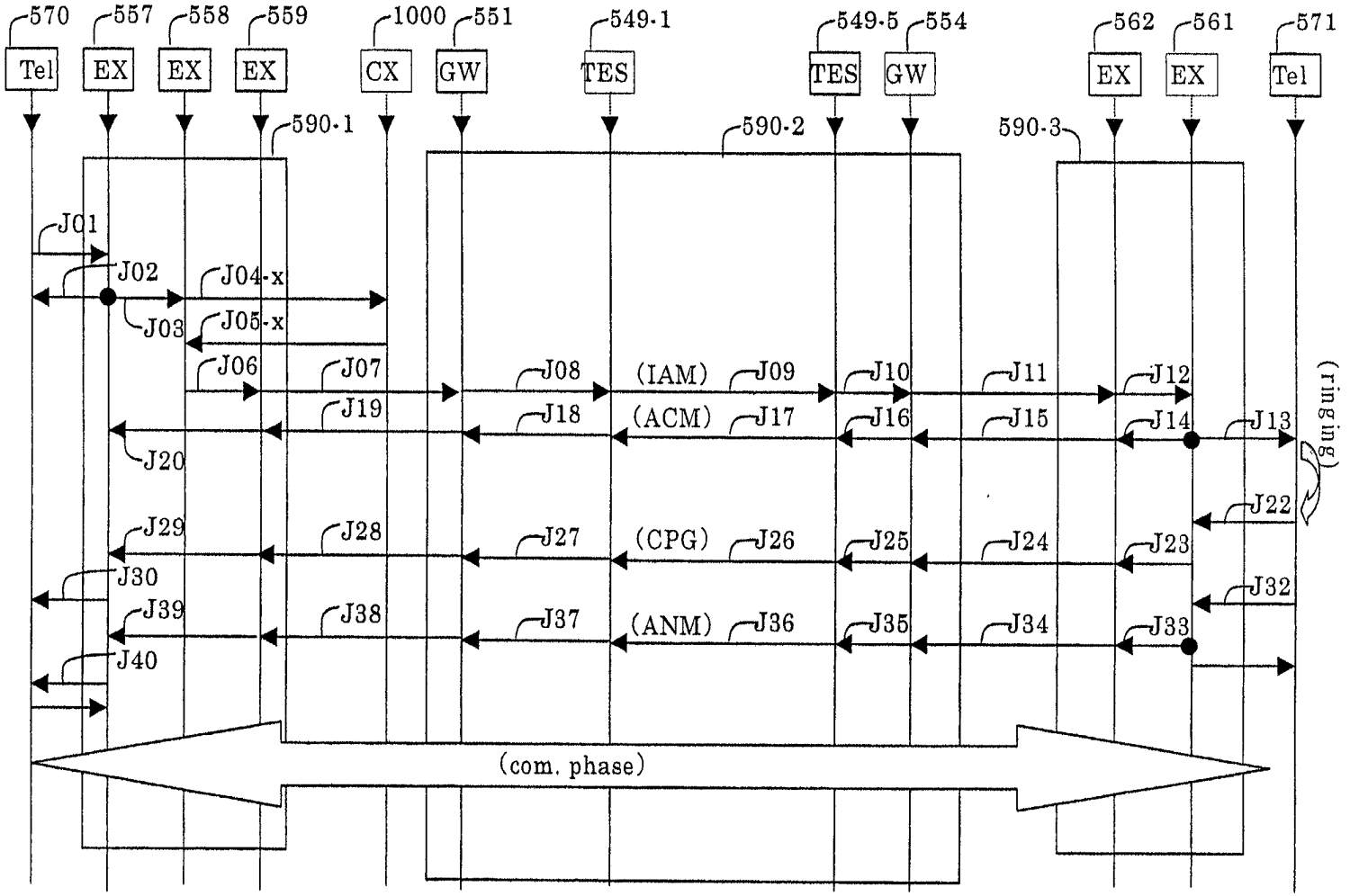

570
557
558
559
1000
551
549-1
549-5
554
562
561
571
Tel
EX
EX
EX
CX
GW
TES
TES
GW
EX
EX
Tel
590-1
590-2
590-3
J01
J02
J04-x
J03
J05-x
J06
J07
J08
(IAM)
J09
J10
J11
J12
J19
J18
(ACM)
J17
J16
J15
J14
J13
(ringing)
J20
J22
J29
J28
J27
(CPG)
J26
J25
J24
J23
J30
J32
J39
J38
J37
(ANM)
J36
J35
J34
J33
J40
(com. phase)

FIG.212

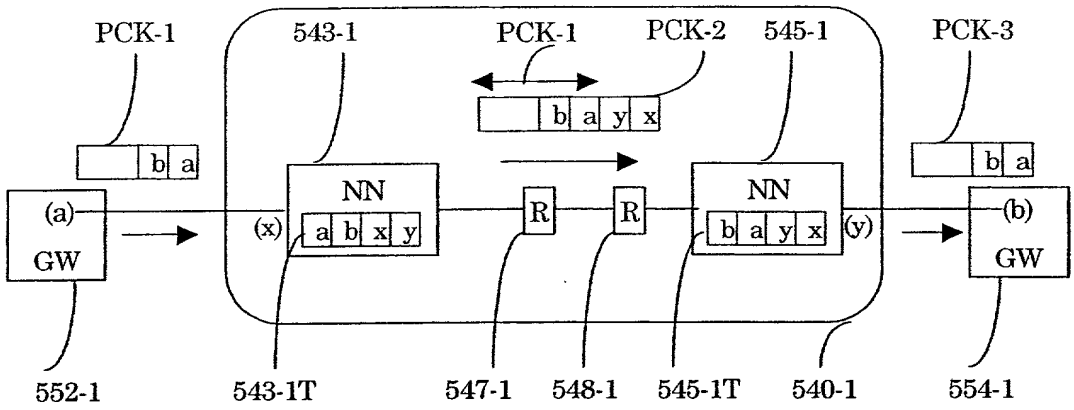
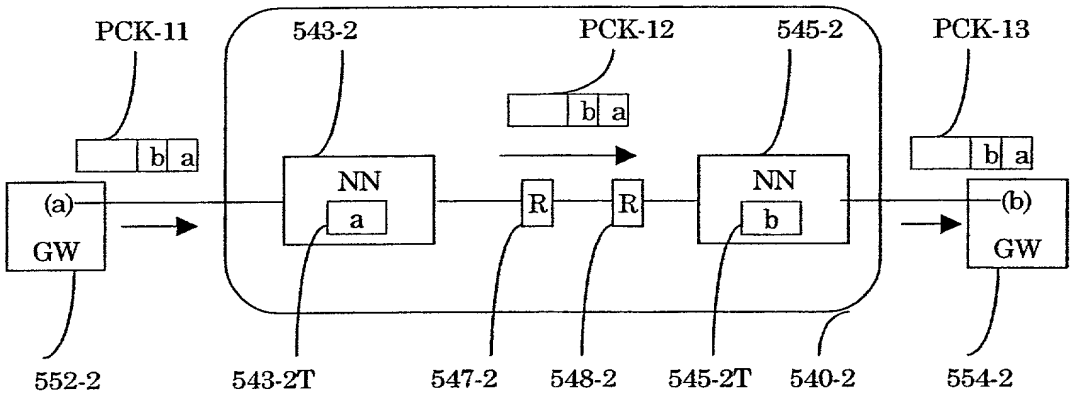


FIG.213



TO2280 "2922860

FIG.214

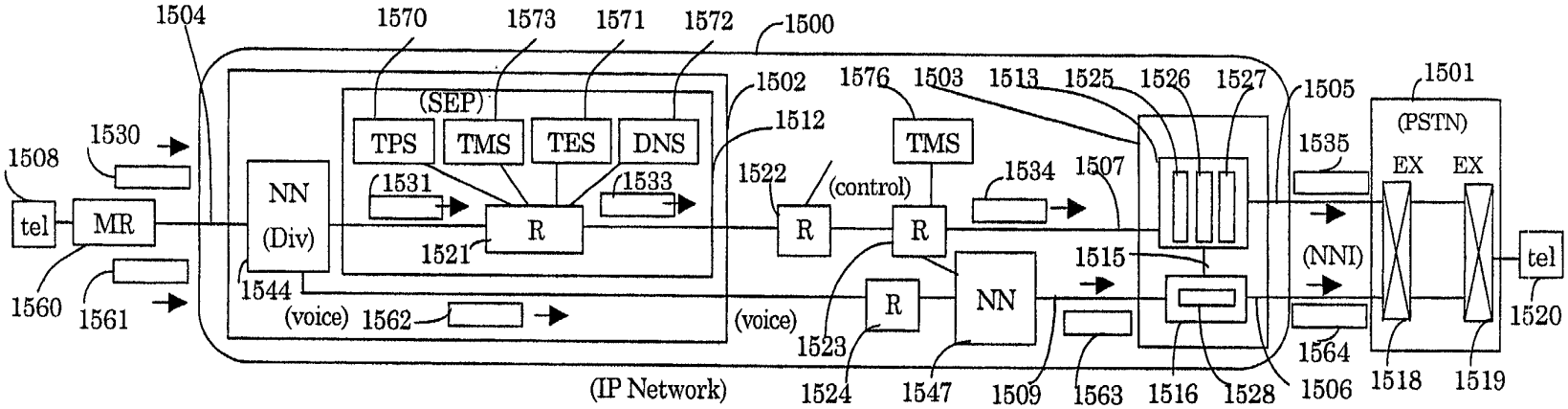


FIG.215

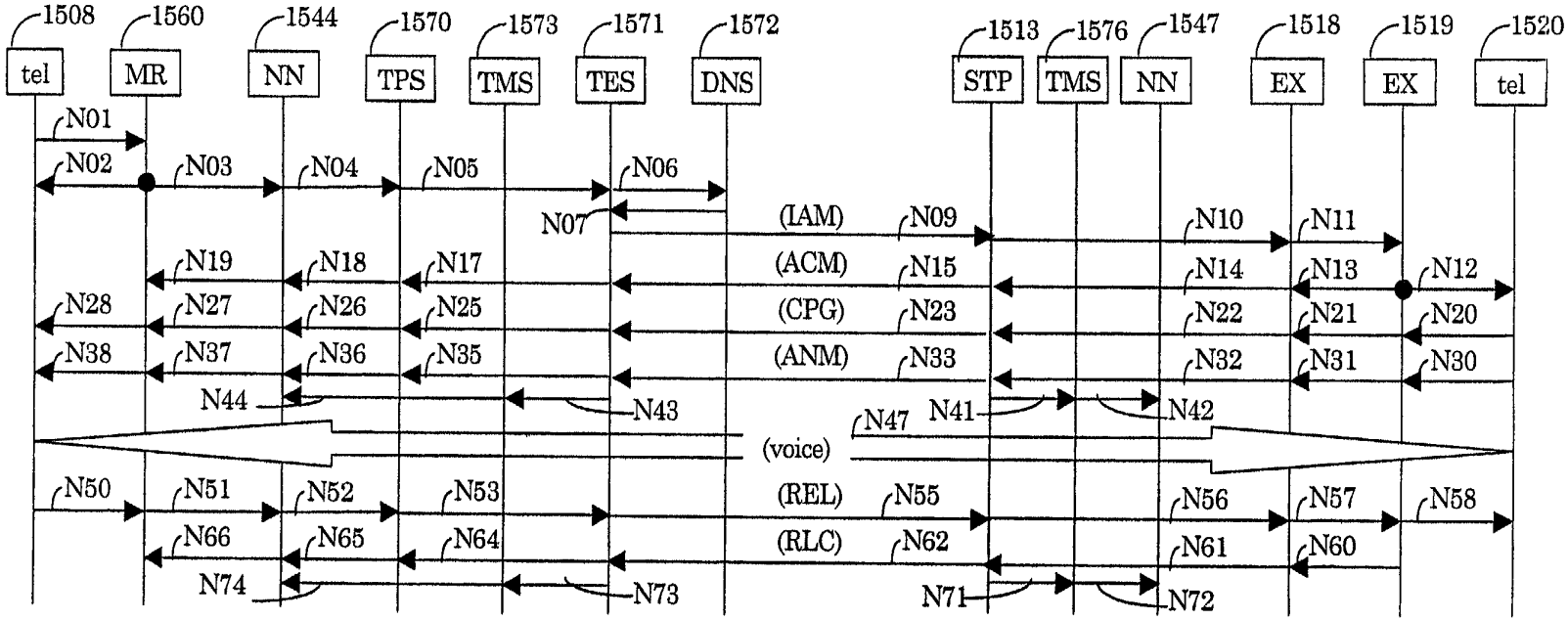


FIG.216

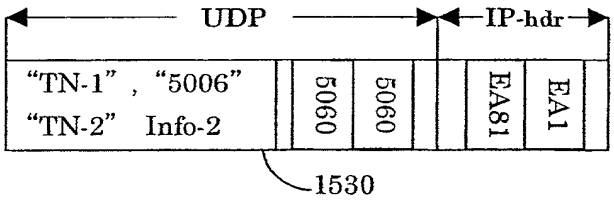


FIG.217

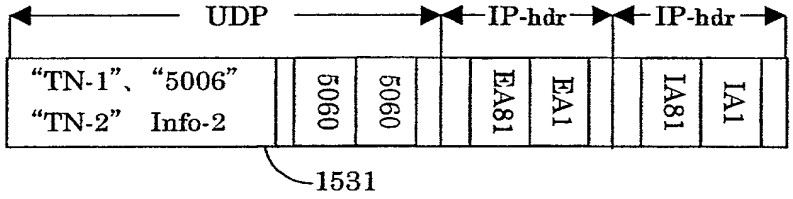


FIG.218

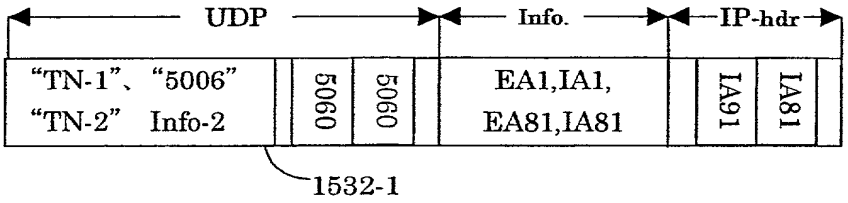


FIG.219

1571-1

Adr. for Call Control	CIC No.	Step	Phone No.	Address for User	Voice Port No.	TPS Address	Start Time	End Time
IA91		IAM	TN-1 TN-2	EA1,IA1	5006	EA81,IA81	St2	
	. .	. .	. .	. .	. .		. .	. .

FIG.220

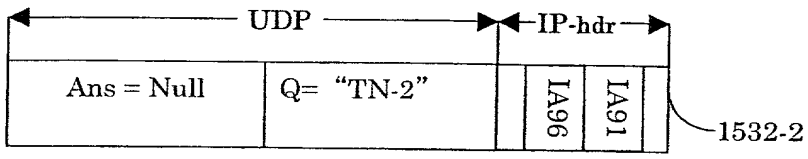


FIG.221

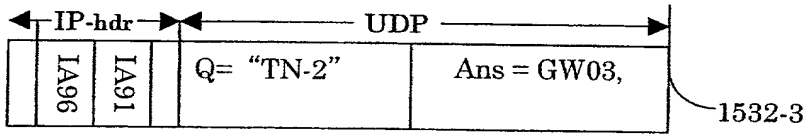


FIG.222

1571-2

Adr. for Call Control	CIC No.	Step	Phone No.	Address for User	Voice Port No.	TPS Address	Start Time	End Time
IA91 GW03	CIC-2	IAM	TN-1 TN-2	EA1,IA1	5006	EA81,IA81	St2	
	. .	. .	. .	. .	. .		. .	. .

FIG.223

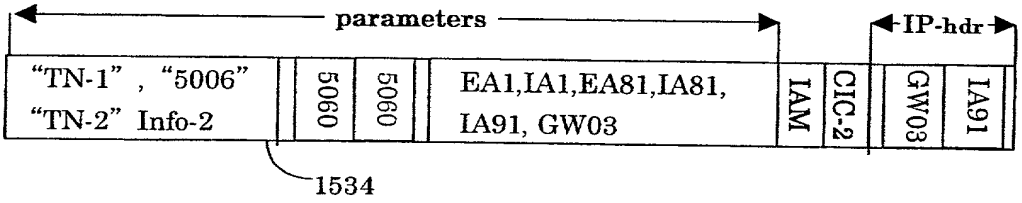


FIG.224

1513-1

Adr. for Call Control	CIC No.	Step	Phone No.	Address for User	Voice Port No.	TPS Address	Start Time	End Time
IA91 GW03	CIC-2	IAM	TN-1 TN-2	EA1,IA1	5006	EA81,IA81	St3	
	. .	. .	. .	. .	. .		. .	. .

FIG.225

1527

Range of Receiver Phone No.	Sig. Pt. Code
02-0000-0000～06-9999-9999	#1112
09-0000-0000～09-9999-9999	#1119
(default)	#1111

hex-decimal

FIG.226

1525-1

No.	PSTN1501				IPnet1500			MP-id
1	PC-3	PC-19	SLS-3	CIC-3	GW03	IA91	CIC-2	MP-7
2								

FIG.227

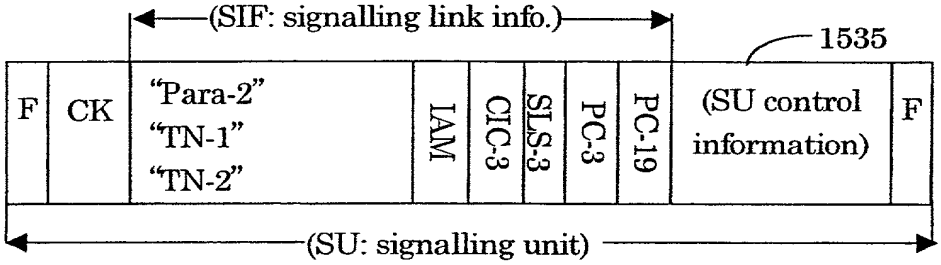


FIG.228

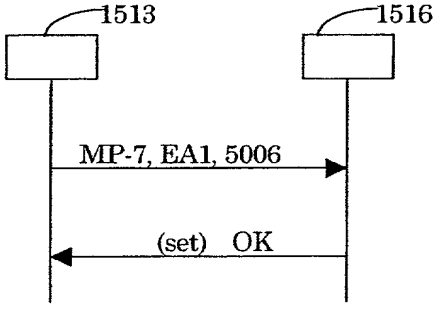


FIG.229

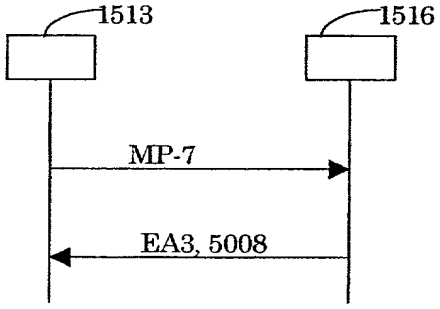


FIG.230

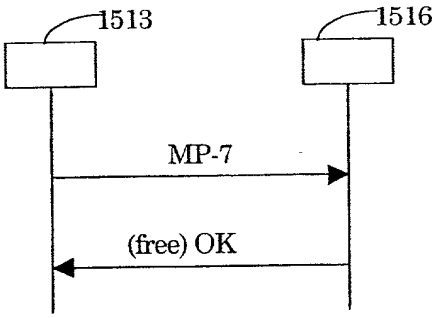


FIG.231

1528-1

MP-id	IP-addr-d	Port-d	IP-addr-o	Port-o	Channel-S	Channel-R
Null	—	—	—	—	—	—
. .	. .	. .	. .	. .	. .	. .

Fig.232

1528-2

MP-id	IP-addr-d	Port-d	IP-addr-o	Port-o	Channel-S	Channel-R
MP-7			EA1	5006	CH-1	
. .	. .	. .	. .	. .	. .	. .

Fig.233

1528-3

MP-id	IP-addr-d	Port-d	IP-addr-o	Port-o	Channel-S	Channel-R
MP-7	EA3	5008	EA1	5006	CH-1	CH-2
. .	. .	. .	. .	. .	. .	. .

FIG.234

1513-2

Adr. for Call Control	CIC No.	Step	Phone No.	Address for User	User Port No.	TPS Address	Start Time	End Time
IA91 GW03	CIC-2	IAM	TN-1 TN-2	EA1,IA1 EA3,IA3	5006 5008	EA81,IA81	St3	
	. .	. .	. .	. .	. .		. .	. .

FIG.235

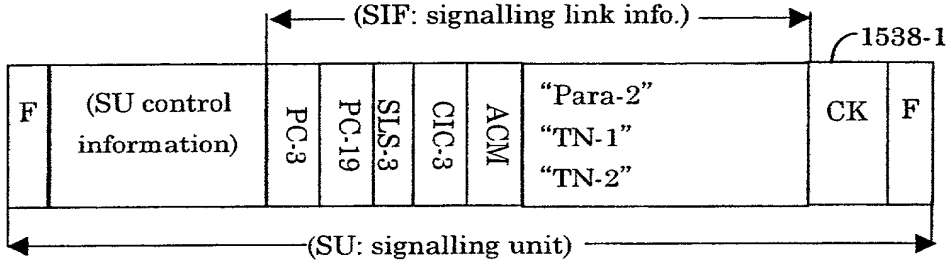


FIG.236

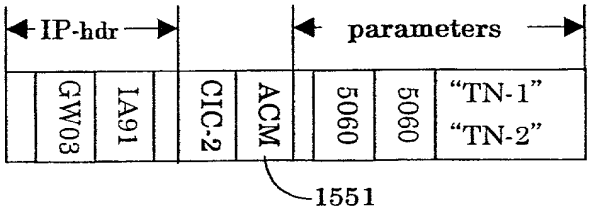


FIG.237

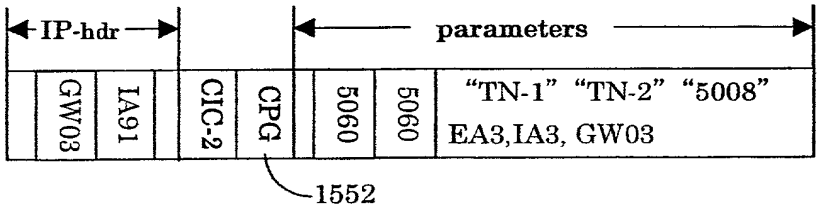


FIG.238

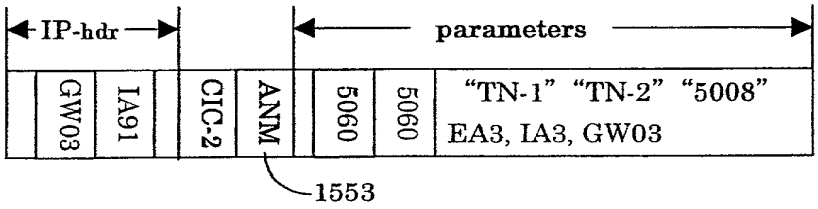


FIG.239

1513-3

Adr. for Call Control	CIC No.	Step	Phone No.	Address for User	User Port No.	TPS Address	Start Time	End Time
IA91 GW03	CIC-2	ANM	TN-1 TN-2	EA1,IA1 EA3,IA3	5006 5008	EA81,IA81	St3	
	. .	. .	. .	. .	. .		. .	. .

FIG.240

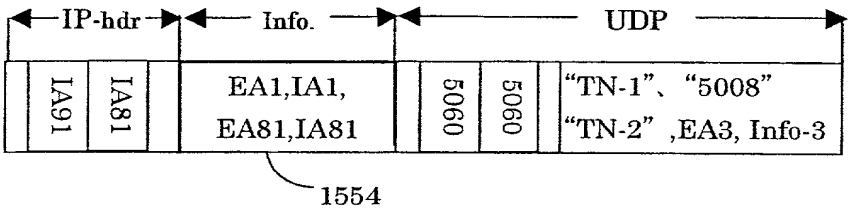


FIG.241

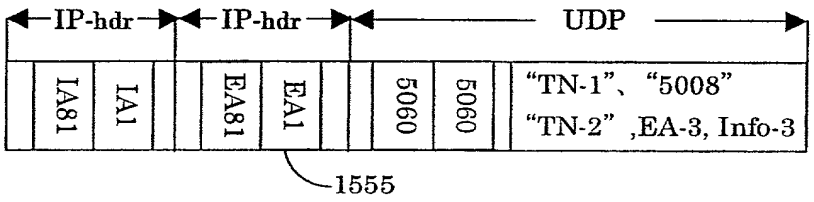


FIG.242

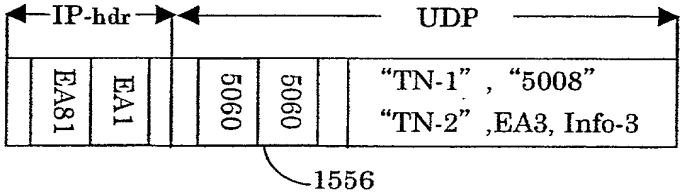


FIG.243

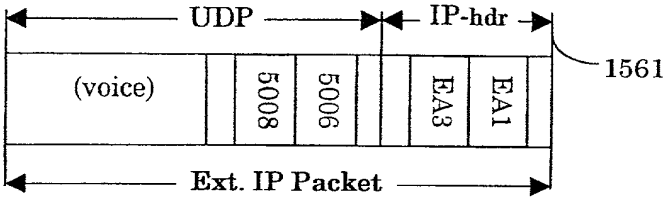


FIG.244

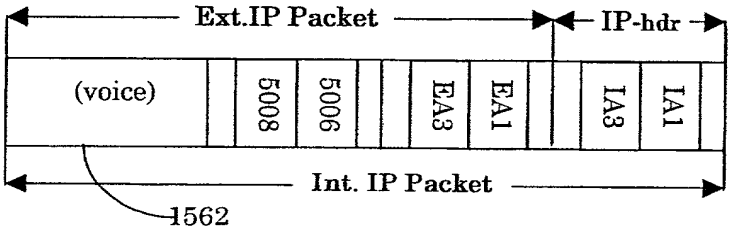


FIG.245

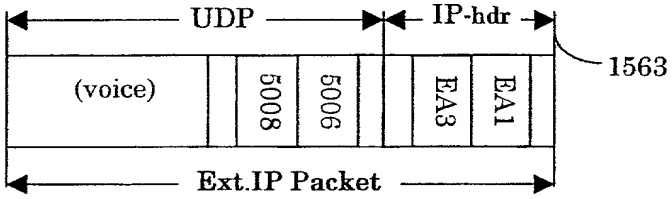


FIG.246

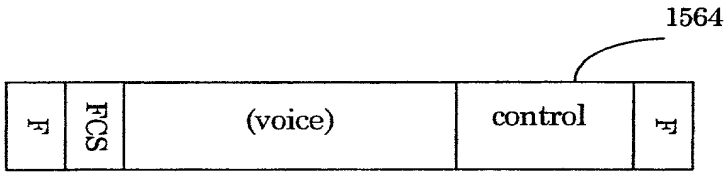


FIG.247

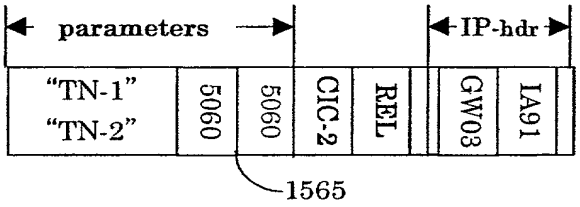


FIG.248

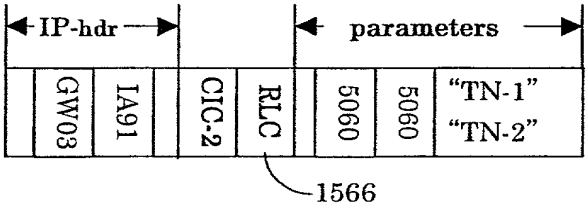


FIG.249

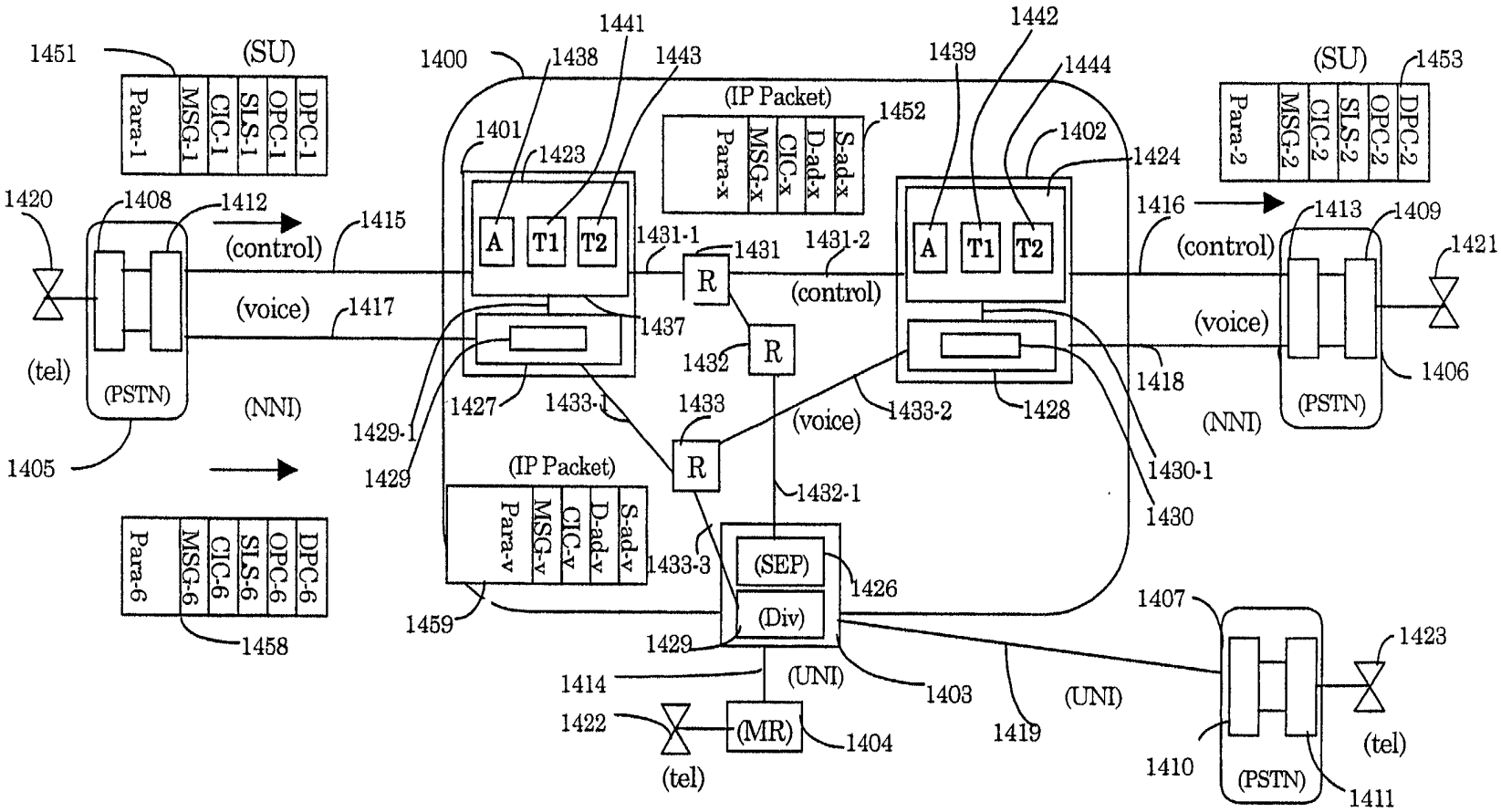

1451
(SU)
Para-1
MSG-1
CIC-1
SLS-1
OPC-1
DPC-1
1400
1438
1441
1443
1439
1442
1444
(IP Packet)
1452
Para-x
MSG-x
CIC-x
D-ad-x
S-ad-x
1401
1423
1402
1424
(SU)
1453
Para-2
MSG-2
CIC-2
SLS-2
OPC-2
DPC-2
1420
1408
1412
1415
1416
1413
1409
1421
(control)
A
T1
T2
1431-1
1431
1431-2
(control)
(control)
(voice)
1417
(voice)
1406
(tel)
(PSTN)
(NNI)
1427
1433-1
1433
1432
1418
1428
(PSTN)
1405
1429-1
1429
(voice)
1433-2
(NNI)
1430-1
1430
(IP Packet)
Para-v
MSG-v
CIC-v
D-ad-v
S-ad-v
1432-1
1433-3
(SEP)
1426
Para-6
MSG-6
CIC-6
SLS-6
OPC-6
DPC-6
1459
(Div)
1407
1423
1458
1429
1414
(UNI)
1403
(UNI)
1419
1422
(MR)
1404
1410
(PSTN)
(tel)
(tel)
1411

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FIG.250

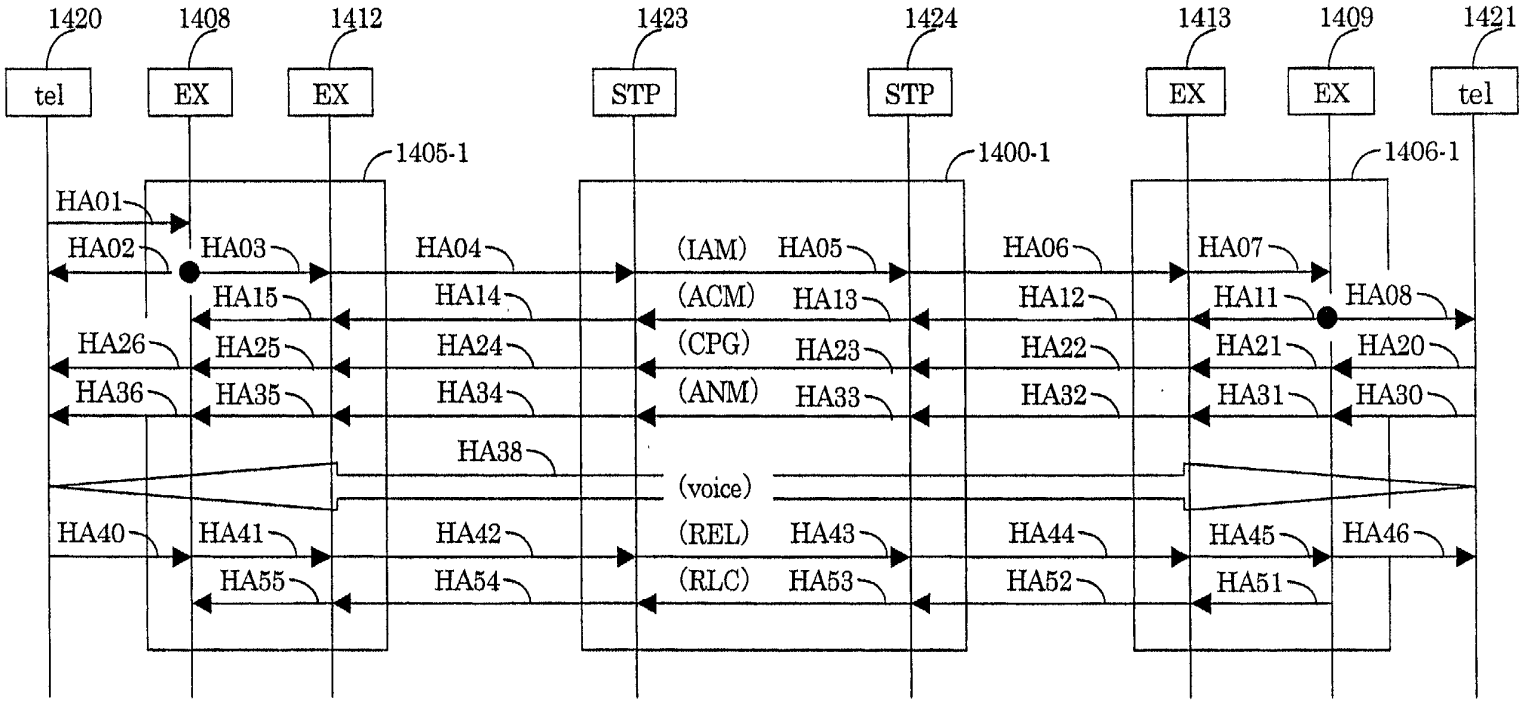


FIG.251

1441-1

Range of Receiver Phone No.	Range of IP Address
06-0000-0000～06-9999-9999	10.240.240.1～10.240.240.2
092-000-0000～092-999-9999	10.240.241.1～10.240.241.1
045-777-8880～045-777-8890	10.241.1.1 ～ 10.241.1.3
(default)	10.242.1.1

FIG.252

1441-2

Range of Receiver Phone No.	Sig. Pt. Code
06-0000-0000～06-9999-9999	#1111
092-000-0000～092-999-9999	#1122
045-777-8880～045-777-8890	#3344
(default)	#1113

hex-decimal

FIG.253

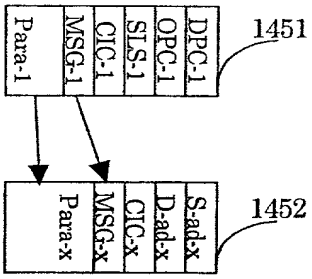
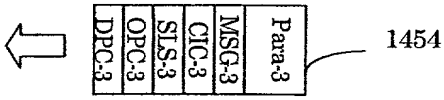


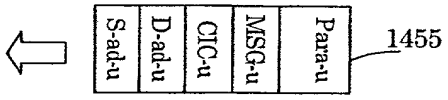
FIG.254



(DPC-3=OPC-2, OPC-3=DPC-2)

(SLS-3=SLS-2,CIC-3=CIC-2,MSG-=ACM)

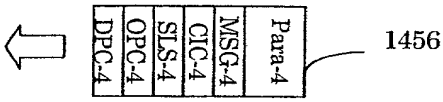
FIG.255



(S-ad-u=D-ad-x, D-ad-u=S-ad-x)

(CIC-u= CIC-x, MSG-u=ACM)

FIG.256



(DPC-4=OPC-1, OPC-4=DPC-1)

(SLS-4=SLS-1,CIC-4=CIC-1, MSG-4=ACM)

FIG.257

1423-1

Adr. for Call Control	CIC No.	Step	Phone No.	Address for User	User Port No.	TPS Address	Start Time	End time
GW05	CIC-2	IAM	TN-1 TN-2	EA5,IA5	5010		St5	
	. .	. .	. .	. .	. .		. .	. .

FIG.258

1424-1

Adr. for Call Control	CIC No.	Step	Phone No.	Address for User	User Port No.	TPS Address	Start Time	End Time
GW06 GW05	CIC-2	ANM	TN-1 TN-2	EA5,IA5	5010		St6	
	. .	. .	. .	. .	. .		. .	. .

FIG.259

1424-2

Adr. for Call Control	CIC No.	Step	Phone No.	Address for User	User Port No.	TPS Address	Start Time	End Time
GW06 GW05	CIC-2	CPG	TN-1 TN-2	EA6,IA6 EA5,IA5	5012 5010		St6	
	. .	. .	. .	. .	. .		. .	. .

FIG.260

1423-2

Adr. for Call Control	CIC No.	Step	Phone No.	Address for User	User Port No.	TPS Address	Start Time	End Time
GW05 GW06	CIC-2	CPG	TN-1 TN-2	EA5,IA5 EA6,IA6	5010 5012		St5	
	. .	. .	. .	. .	. .		. .	. .

EP 2 685 695 A1

FIG.261

1438-1

No.	PSTN1405				IPnet1400			MP-id
1								
2								

FIG.262

1438-2

No.	PSTN1405				IPnet1400			MP-id
1	DPC-1	OPC-1	SLS-1	CIC-1	S-ad-x	D-ad-x	CIC-x	MP-8
2								

FIG.263

1439-1

No.	PSTN1406				IPnet1400			MP-id
1								
2								

FIG.264

1439-2

No.	PSTN1406				IPnet1400			MP-id
1	OPC-2	DPC-2	SLS-2	CIC-2	D-ad-x	S-ad-x	CIC-x	MP-9
2								

FIG.265

1429-1

MP-id	IP-addr-d	Port-d	IP-addr-o	Port-o	Channel-S	Channel-R
MP-8	EA5	5010			CH-1	CH-2
. .	. .	. .	. .	. .	. .	. .

FIG.266

1430-1

MP-id	IP-addr-d	Port-d	IP-addr-o	Port-o	Channel-S	Channel-R
MP-9	EA6	5012	EA5	5010	CH-3	CH-4
. .	. .	. .	. .	. .	. .	. .

FIG.267

1429-2

MP-id	IP-addr-d	Port-d	IP-addr-o	Port-o	Channel-S	Channel-R
MP-8	EA5	5010	EA6	5012	CH-1	CH-2
. .	. .	. .	. .	. .	. .	. .

FIG.268

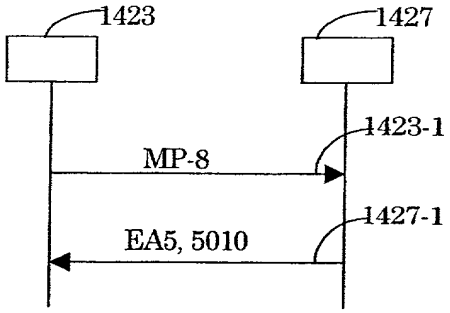


FIG.269

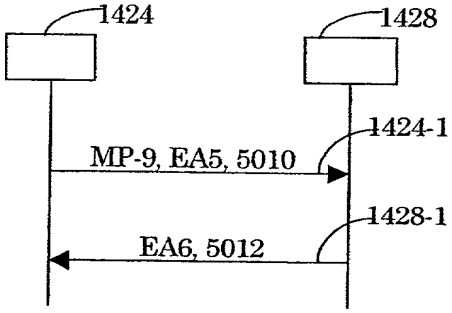


FIG.270

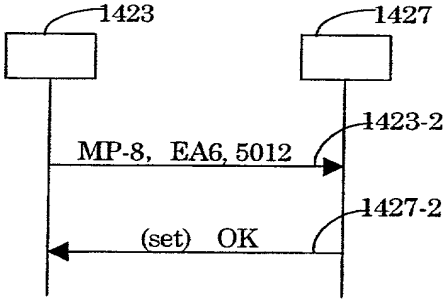


FIG.271

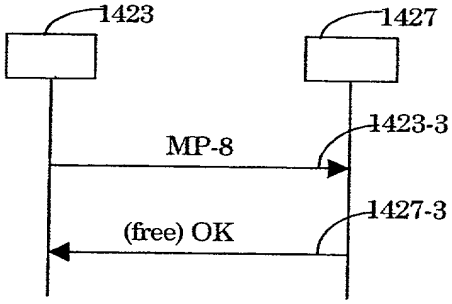


FIG.272

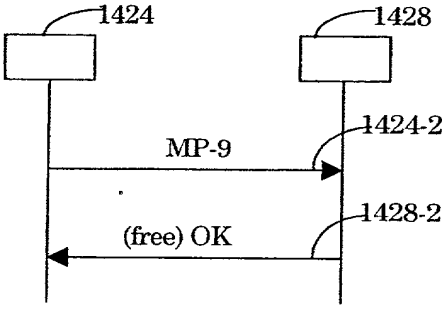


FIG.273

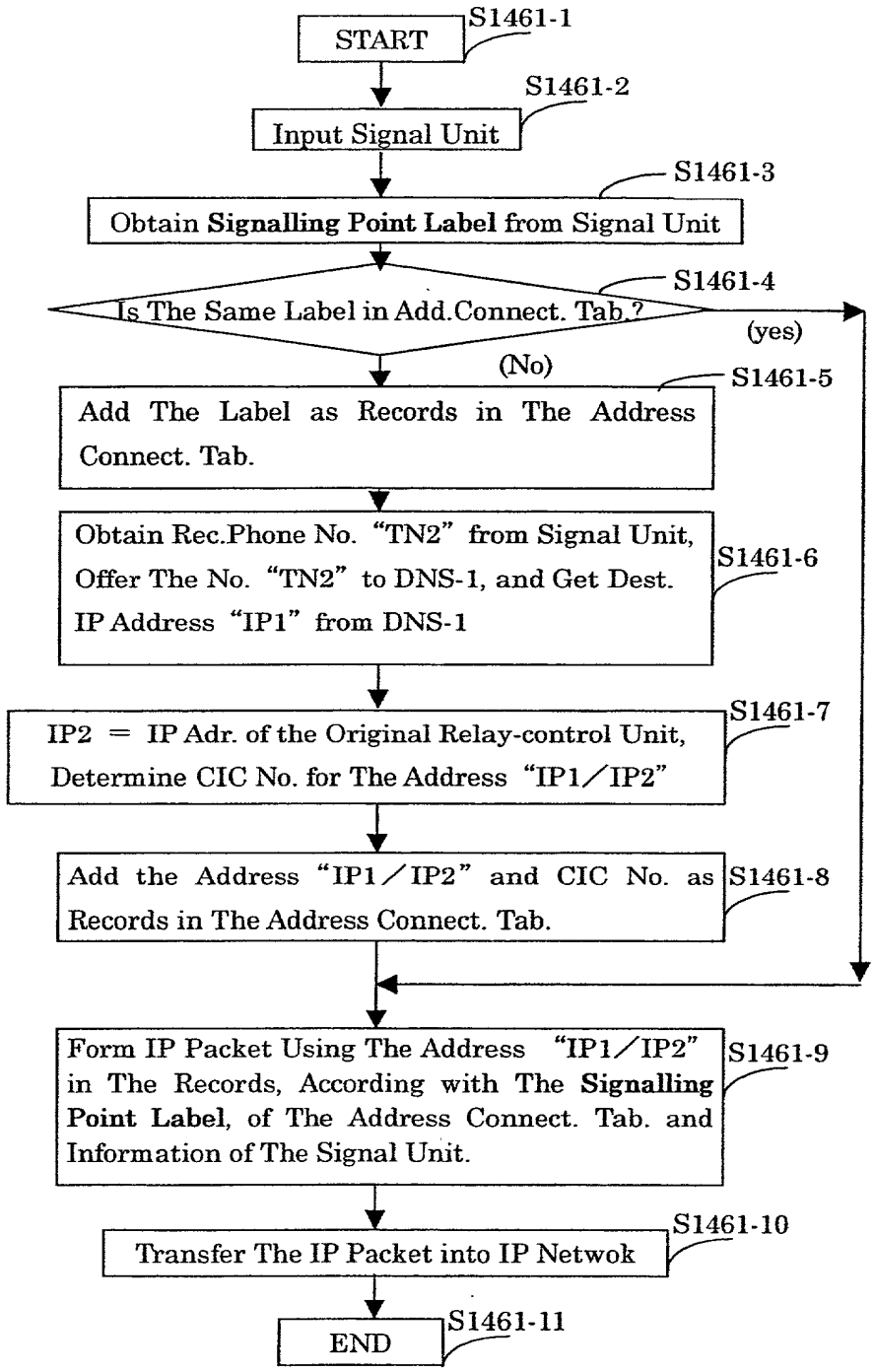

START
S1461-1
Input Signal Unit
S1461-2
Obtain Signalling Point Label from Signal Unit
S1461-3
Is The Same Label in Add.Connect. Tab.?
S1461-4
(yes)
(No)
Add The Label as Records in The Address Connect. Tab.
S1461-5
Obtain Rec.Phone No. "TN2" from Signal Unit, Offer The No. "TN2" to DNS-1, and Get Dest. IP Address "IP1" from DNS-1
S1461-6
IP2 = IP Adr. of the Original Relay-control Unit, Determine CIC No. for The Address "IP1/IP2"
S1461-7
Add the Address "IP1/IP2" and CIC No. as Records in The Address Connect. Tab.
S1461-8
Form IP Packet Using The Address "IP1/IP2" in The Records, According with The Signalling Point Label, of The Address Connect. Tab. and Information of The Signal Unit.
S1461-9
Transfer The IP Packet into IP Netwok
S1461-10
END
S1461-11

FIG.274

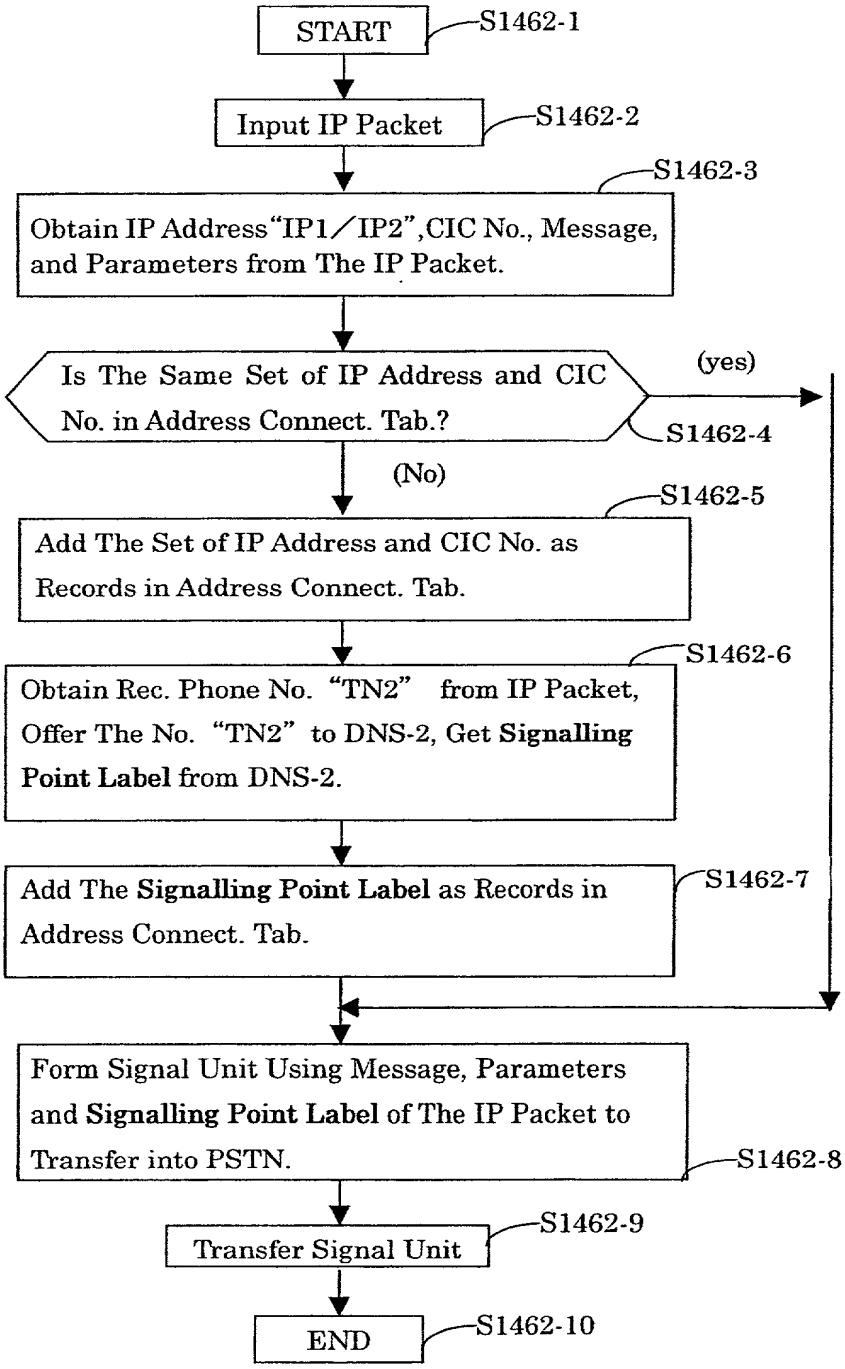

START
S1462-1
Input IP Packet
S1462-2
S1462-3
Obtain IP Address"IP1/IP2",CIC No., Message, and Parameters from The IP Packet.
Is The Same Set of IP Address and CIC No. in Address Connect. Tab.?
(yes)
S1462-4
(No)
S1462-5
Add The Set of IP Address and CIC No. as Records in Address Connect. Tab.
S1462-6
Obtain Rec. Phone No. "TN2" from IP Packet, Offer The No. "TN2" to DNS-2, Get Signalling Point Label from DNS-2.
Add The Signalling Point Label as Records in Address Connect. Tab.
S1462-7
Form Signal Unit Using Message, Parameters and Signalling Point Label of The IP Packet to Transfer into PSTN.
S1462-8
Transfer Signal Unit
S1462-9
END
S1462-10

FIG.275

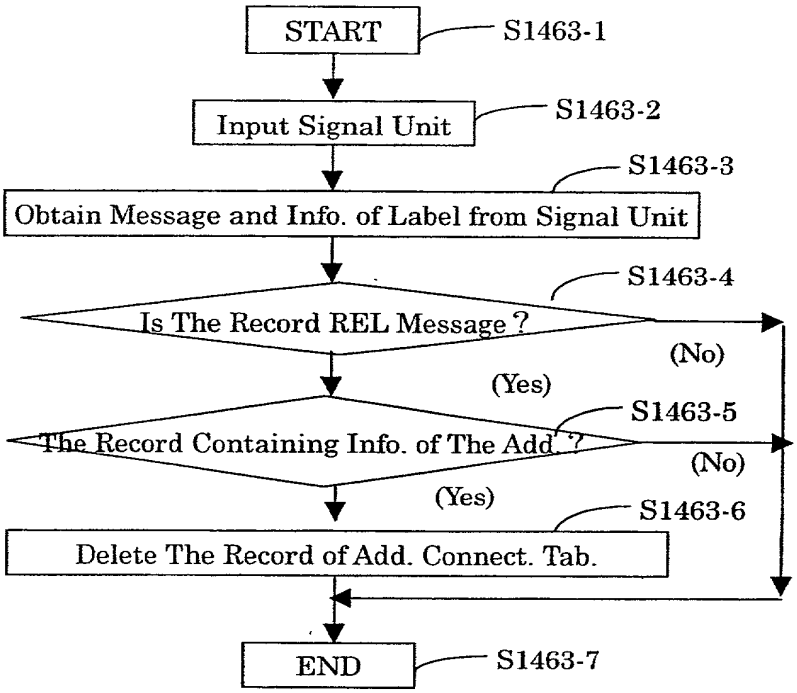


FIG.276

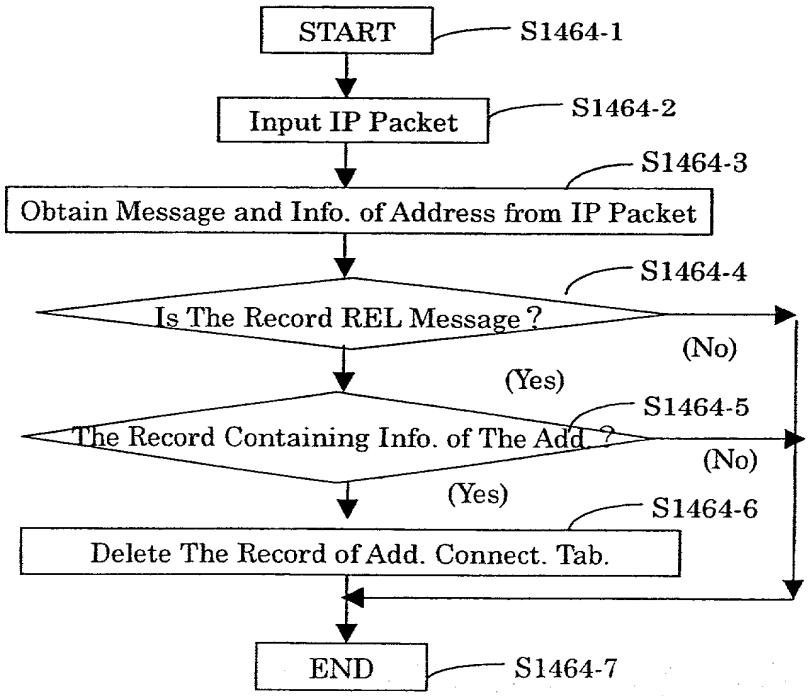


FIG.277

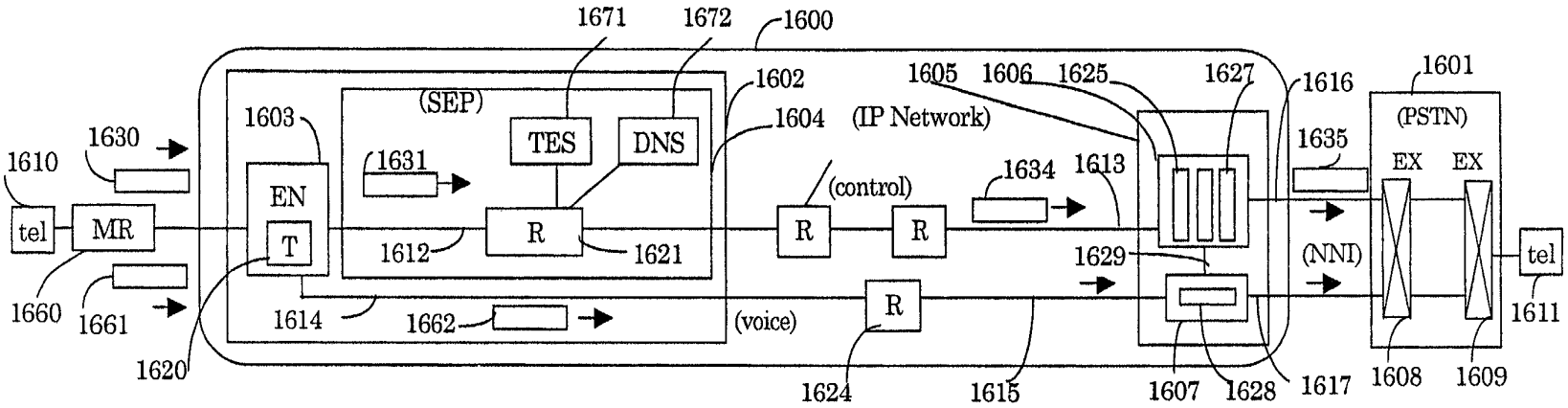


FIG.278

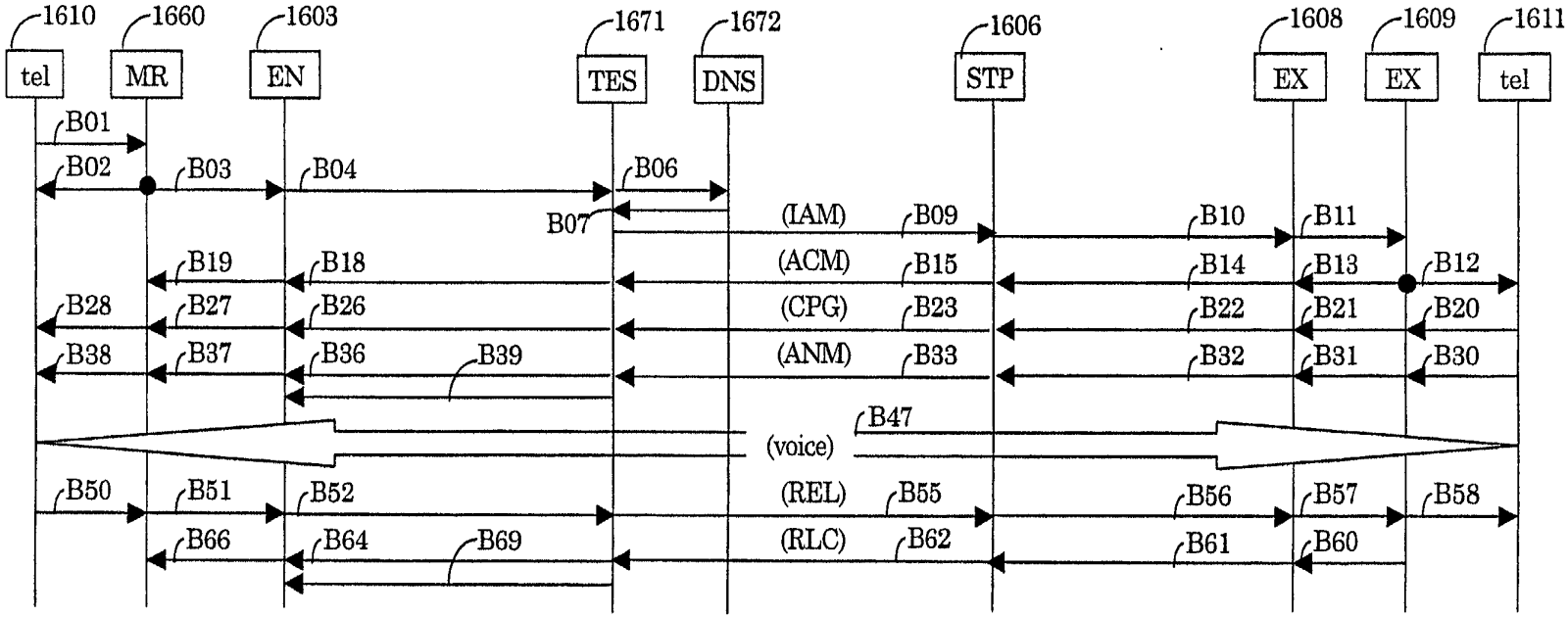


FIG.279

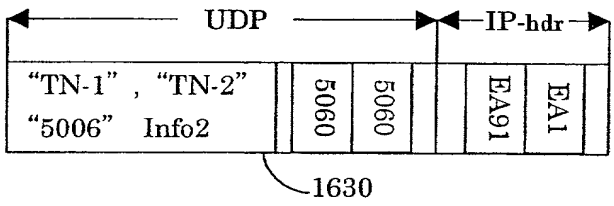


FIG.280

1620-1

Source IP address	Source Port No	Dest. IP address	Dest. Port No	Output I/F
EA1	5060	EA91	5060	IF1612
EA23	5060	EA91	5060	IF1612
Null				
· ·				

FIG.281

1671-1

Adr.for Call Control	CIC No.	Step	Phone No.	Ext. IP Address	Port No.	Start Time	End Time
IA91		IAM	TN-1 TN-2	EA1	5006	St6	
	· ·	· ·	· ·	· ·	· ·	· ·	· ·

FIG.282

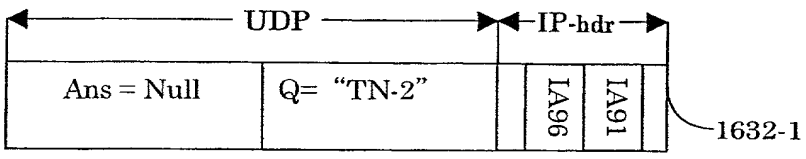


FIG.283

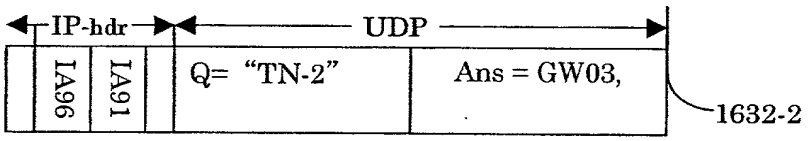


FIG.284

1671-2

Adr. for Call Control	CIC No.	Step	Phone No.	Ext. IP Address	Port No.	Start Time	End Time
IA91 GW03	CIC-2	IAM	TN-1 TN-2	EA1	5006	St6	
	. .	. .	. .	. .	. .	. .	. .

FIG.285

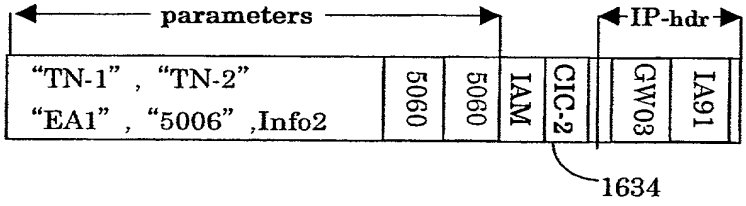


FIG.286

1605-1

Adr. for Call Control	CIC No.	Step	Phone No.	Ext. IP Address	Port No.	Start Time	End Time
IA91 GW03	CIC-2	IAM	TN-1 TN-2	EA1	5006	St7	
	. .	. .	. .	. .	. .	. .	. .

FIG.287

1627

Range of Receiver Phone No.	Sig. Pt. Code
02-0000-0000~06-9999-9999	#1102
09-0000-0000~09-9999-9999	#1109
(default)	#1101

hex-decimal

FIG.288

1625-1

No.	PSTN1601				IPnet1600			MP-id
1	PC-3	PC-09	SLS-3	CIC-3	GW03	IA91	CIC-2	MP-7
2								

FIG.289

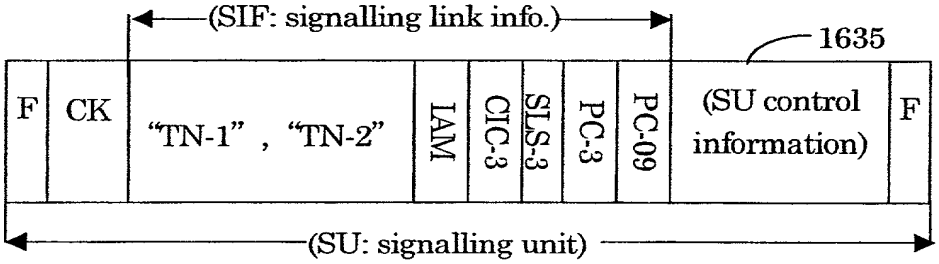


FIG.290

1628-1

MP-id	IP-addr-d	Port-d	IP-addr-o	Port-o	Channel-S	Channel-R
MP-7			EA1	5006	CH-1	
. .	. .	. .	. .	. .	. .	. .

FIG.291

1628-2

MP-id	IP-addr-d	Port-d	IP-addr-o	Port-o	Channel-S	Channel-R
MP-7	EA7	5008	EA1	5006	CH-1	CH-2
. .	. .	. .	. .	. .	. .	. .

FIG.292

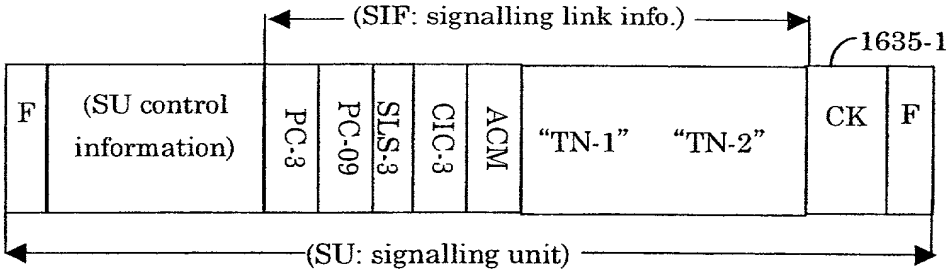


FIG.293

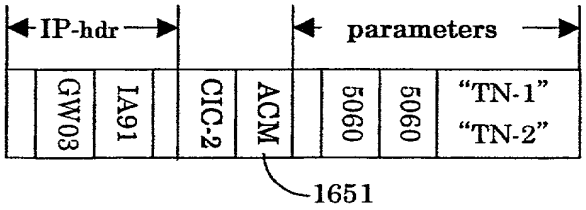


FIG.294

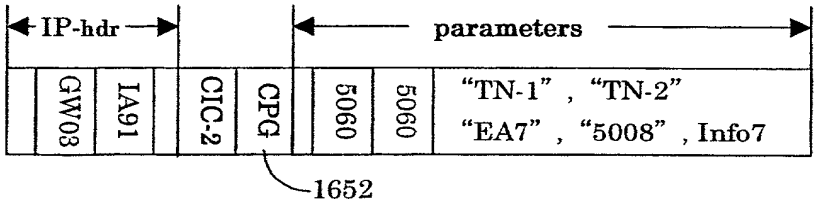


FIG.295

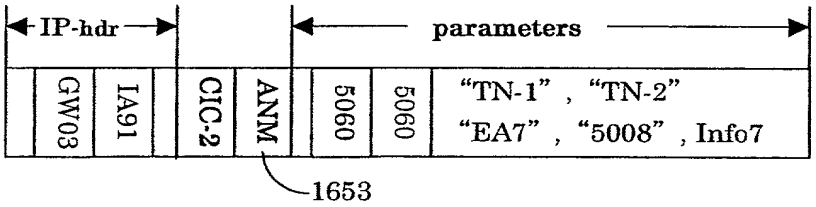


FIG.296

1605-2

Adr. for Call Control	CIC No.	Step	Phone No.	Ext. IP Address	Port No.	Start Time	End Time
IA91 GW03	CIC-2	ANM	TN-1 TN-2	EA1 EA7	5006 5008	St7	
	. .	. .	. .	. .	. .	. .	. .

FIG.297

1671-3

Adr. for Call Control	CIC No.	Step	Phone No.	Ext. IP Address	Port No.	Start Time	End Time
IA91 GW03	CIC-2	ANM	TN-1 TN-2	EA1 EA7	5006 5008	St6	
	. .	. .	. .	. .	. .	. .	. .

FIG.298

1620-2

Source IP address	Source Port No	Dest. IP address	Dest. Port No	Output I/F
EA1	5060	EA91	5060	IF1612
EA23	5060	EA91	5060	IF1612
EA1	5006	EA7	5008	IF1614
Null				
. .				

FIG.299

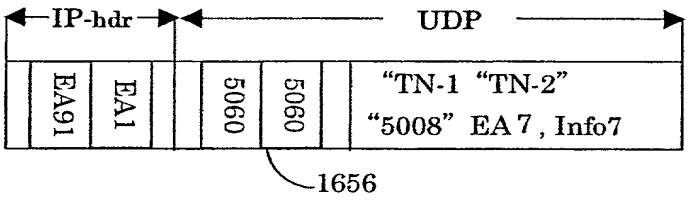


FIG.300

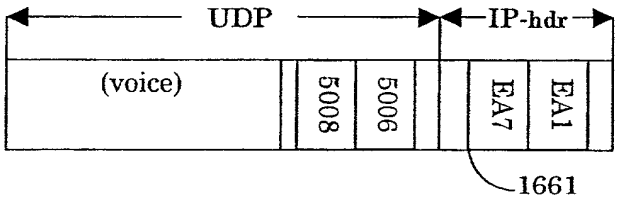


FIG.301

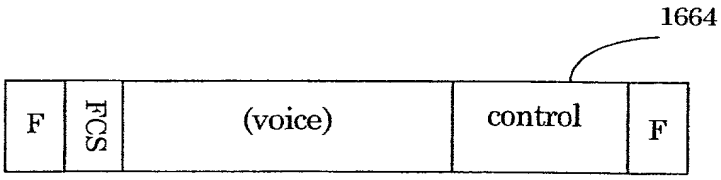


FIG.302

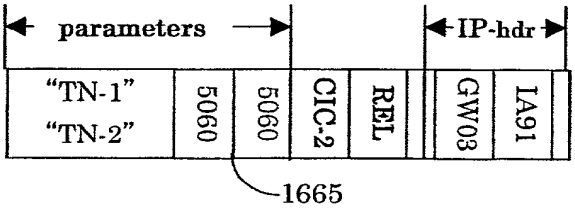


FIG.303

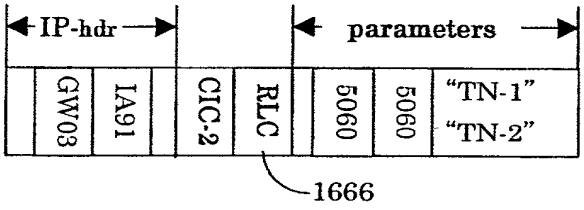
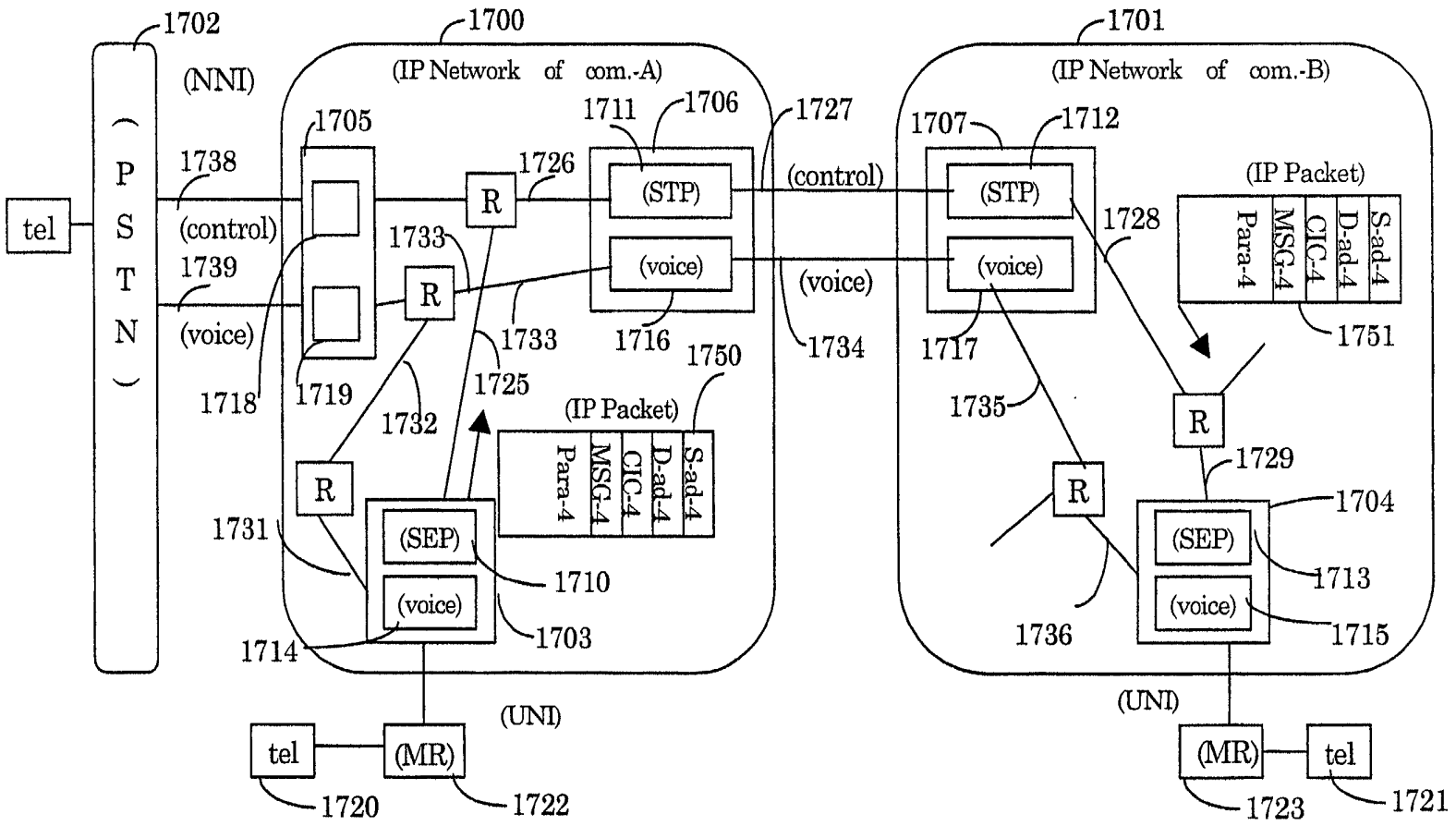


FIG.304

1620-3

Output I/F	Port No
IF1612	5060
IF1614	From 5004 to5048,
. .	. .

FIG.305


1702
(NNI)
1700
(IP Network of com.-A)
1701
(IP Network of com.-B)
tel
P S T N
1738
(control)
1739
(voice)
1705
1726
R
1711
1706
(STP)
(voice)
1727
(control)
(voice)
1734
1707
1712
(STP)
(voice)
1728
(IP Packet)
Para-4
MSG-4
CIC-4
D-ad-4
S-ad-4
1751
1717
1733
1716
1750
1718
1719
1725
1732
(IP Packet)
1735
R
1729
R
1731
(SEP)
(voice)
1710
1703
1704
(SEP)
(voice)
1713
1715
1736
1714
(UNI)
(UNI)
tel
(MR)
1720
1722
(MR)
tel
1723
1721

TD/2850 : 2927/2850

FIG.306

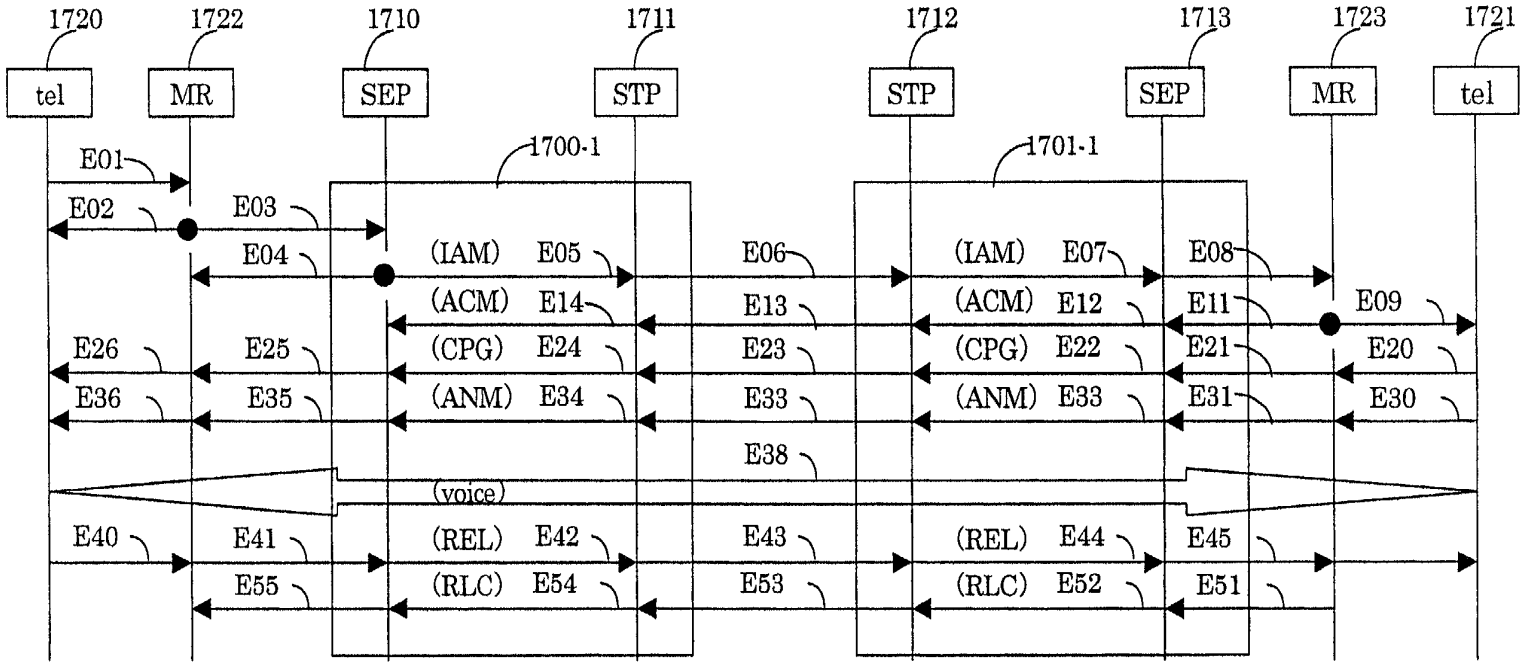


FIG.307

Address for Call Control	CIC No.	Step	Phone No.	Ext. IP Address	Port No. (1711-1)	Start Time	End Time
D-ad-4 S-ad-4	CIC-4	IAM	TN-1 TN-2	EA1722	5014	St5	

FIG.308

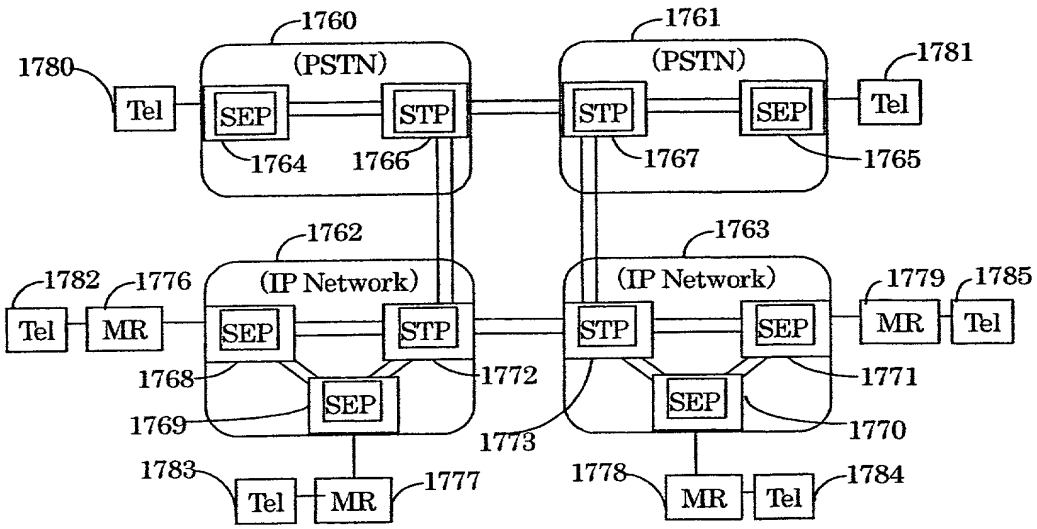
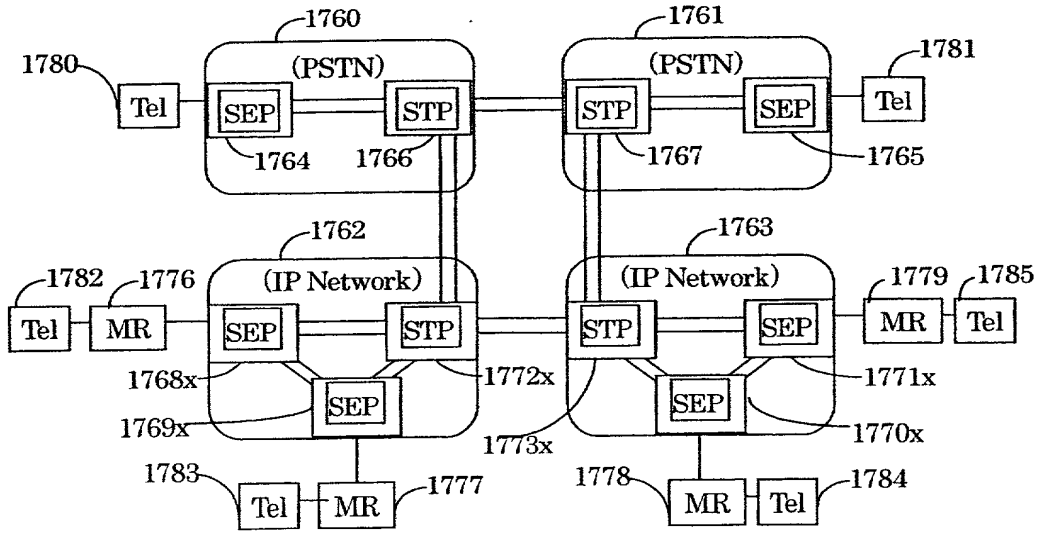


FIG.309



TD2280 "2922860

FIG.310

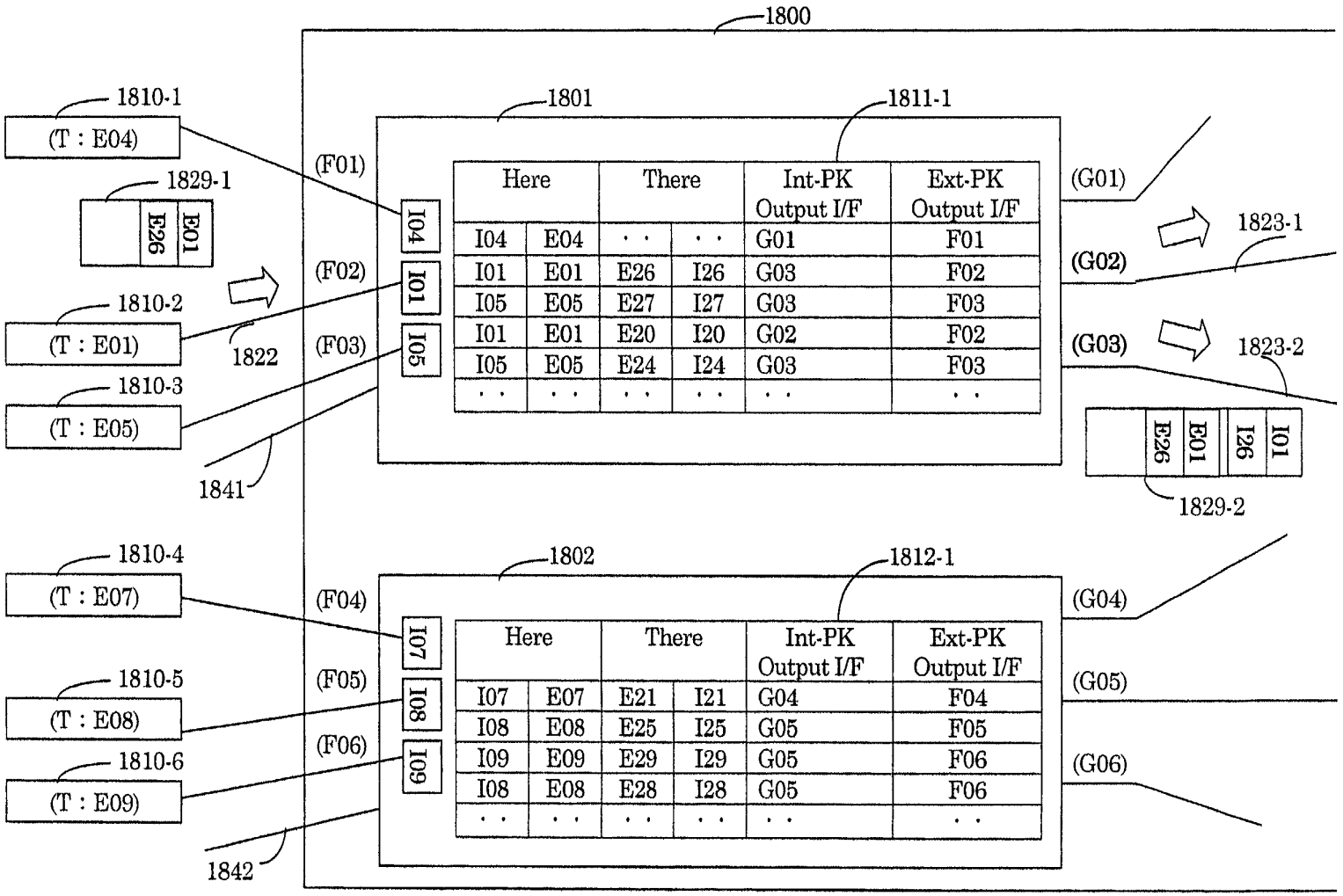


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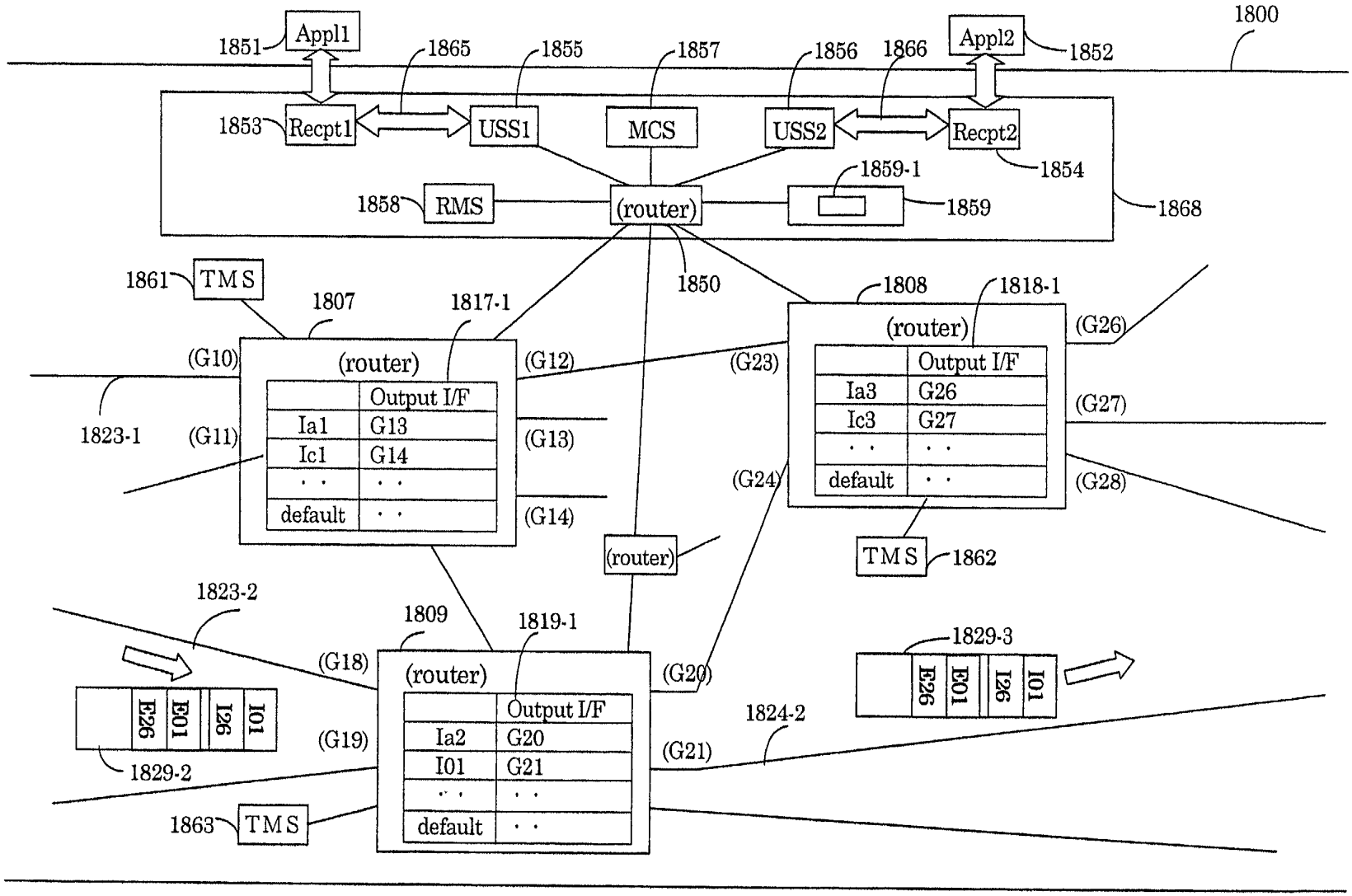
FIG.311



TO2280 '292/2860

FIG.312

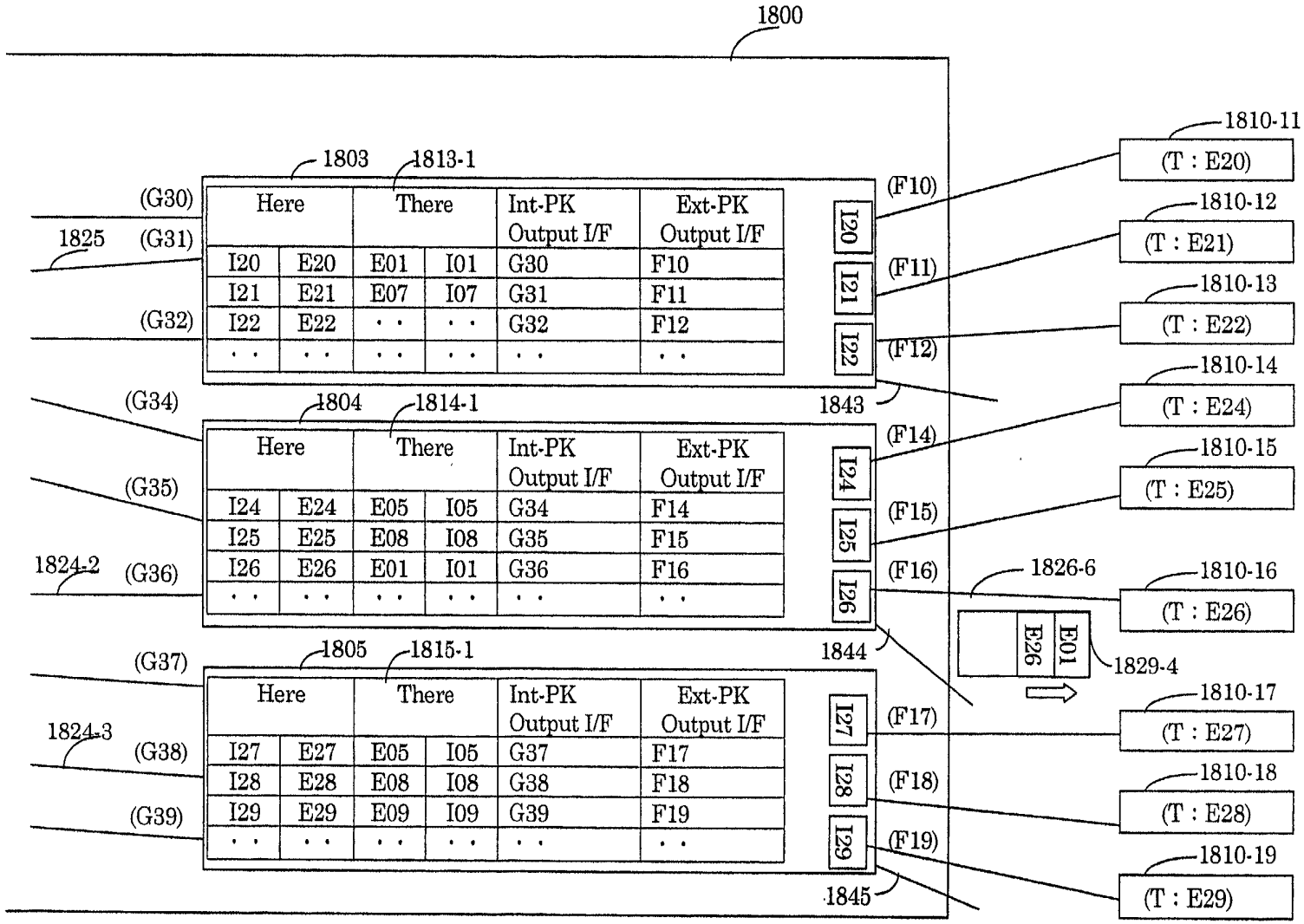


FIG.313

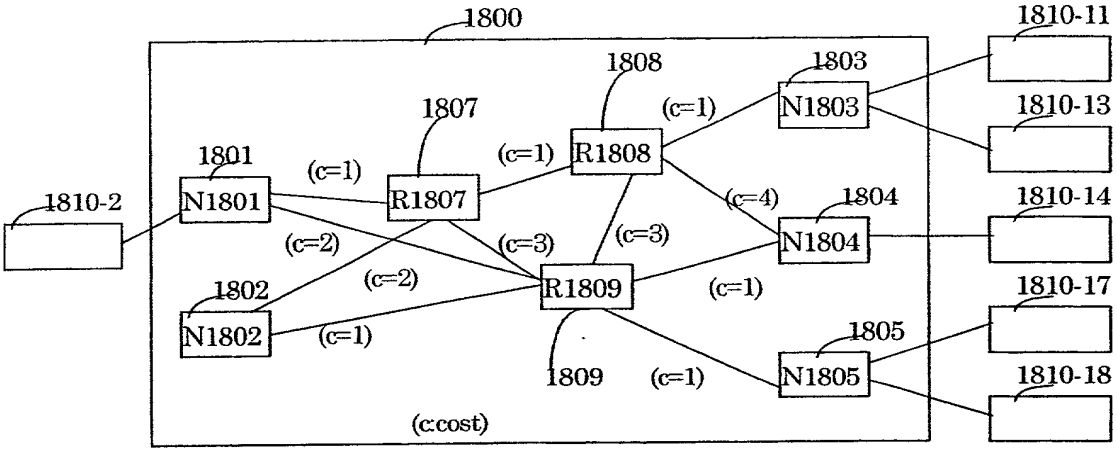


FIG.314

	N1801	N1802	N1803	N1804	N1805	R1807	R1808	R1809	·
N1801						1		2	·
N1802						2		1	·
N1803							1		·
N1804							4	1	·
N1805								1	·
R1807	1	2					1	3	
R1808			1	4		1		3	·
R1809	2	1		1	1	3	3		
· ·	· ·	· ·	· ·	· ·	· ·	· ·	· ·	· ·	·

1869

(note: blank = no connection)

FIG.315

N1801	T1810-2

1870

FIG.316

N1803	T1810-11、T1810-13
N1804	T1810-14
N1805	T1810-17、T1810-18

1871

FIG.317

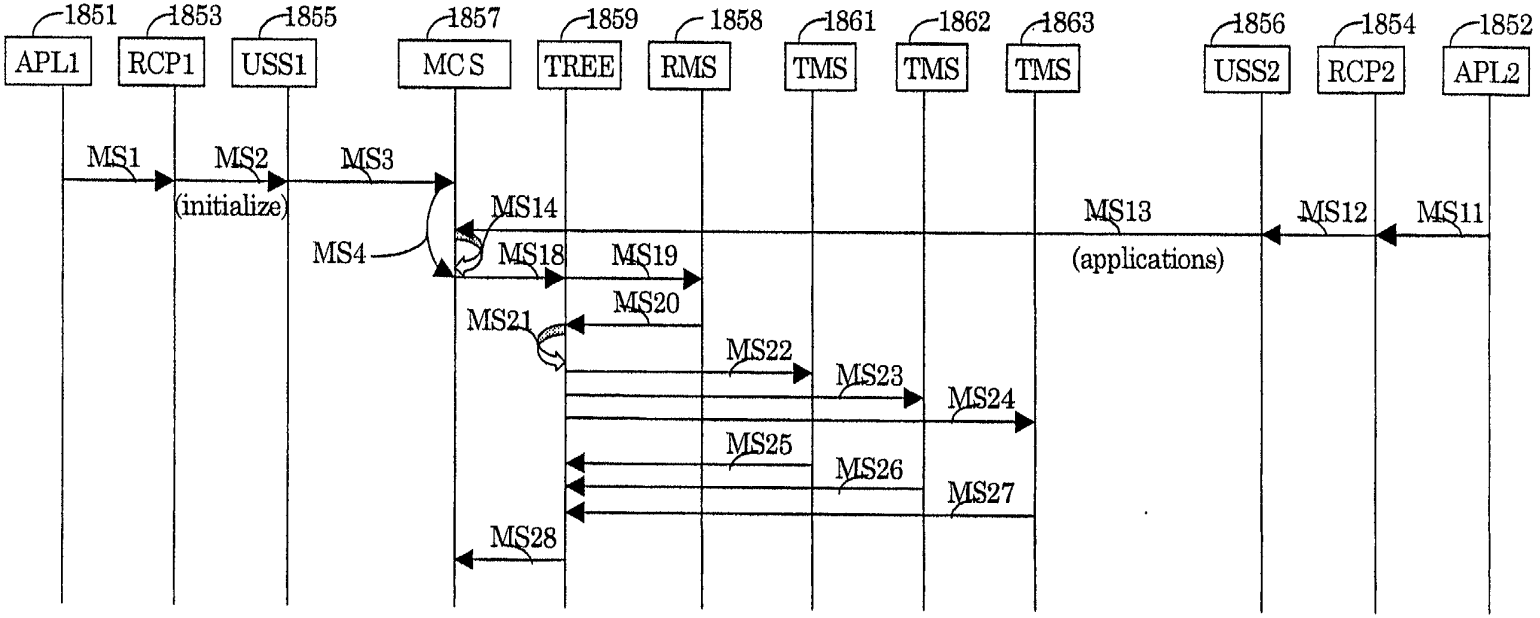

1851
APL1
1853
RCP1
1855
USS1
1857
MCS
1859
TREE
1858
RMS
1861
TMS
1862
TMS
1863
TMS
1856
USS2
1854
RCP2
1852
APL2
MS1
MS2
(initialize)
MS3
MS4
MS14
MS18
MS19
MS20
MS21
MS22
MS23
MS24
MS25
MS26
MS27
MS28
MS13
(applications)
MS12
MS11

FIG.318

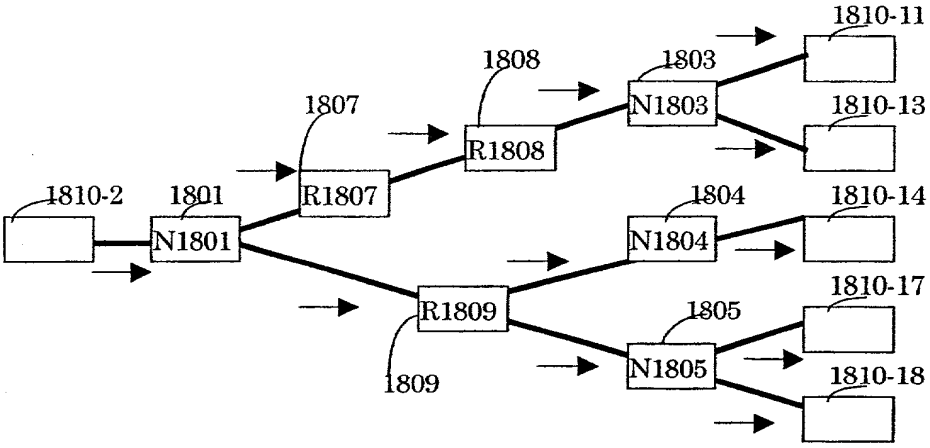


FIG.319

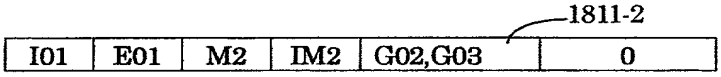


FIG.320

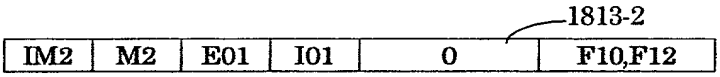


FIG.321

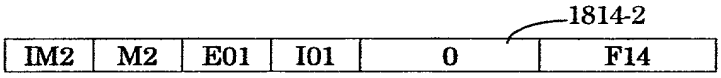


FIG.322

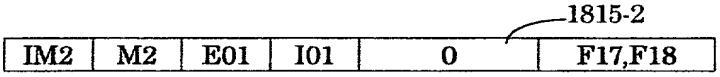


FIG.323

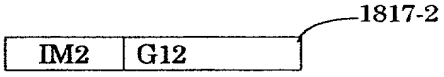


FIG.324

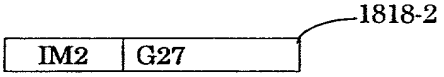
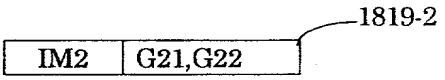


FIG.325



TO2280 "2982860

FIG.326

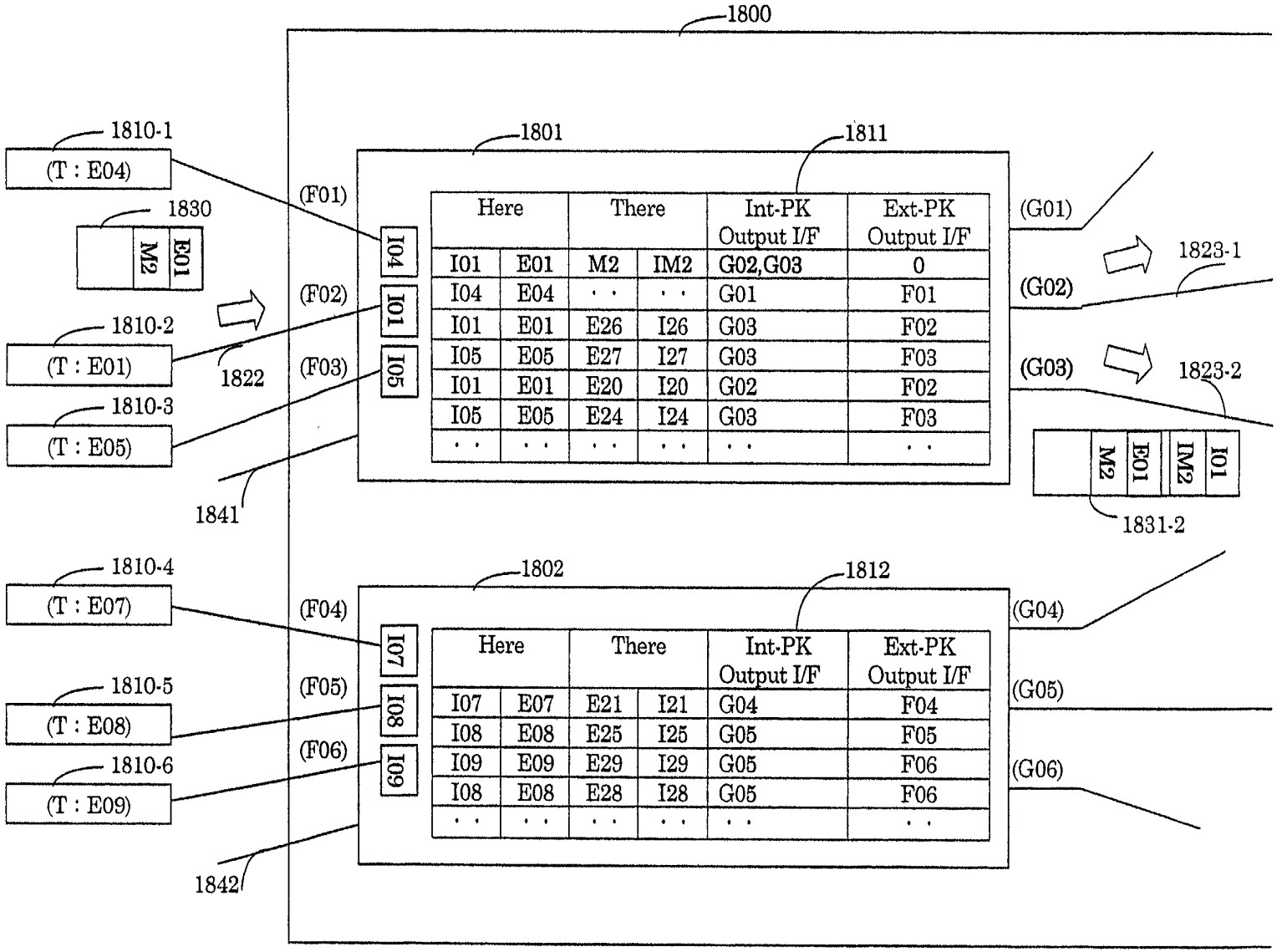


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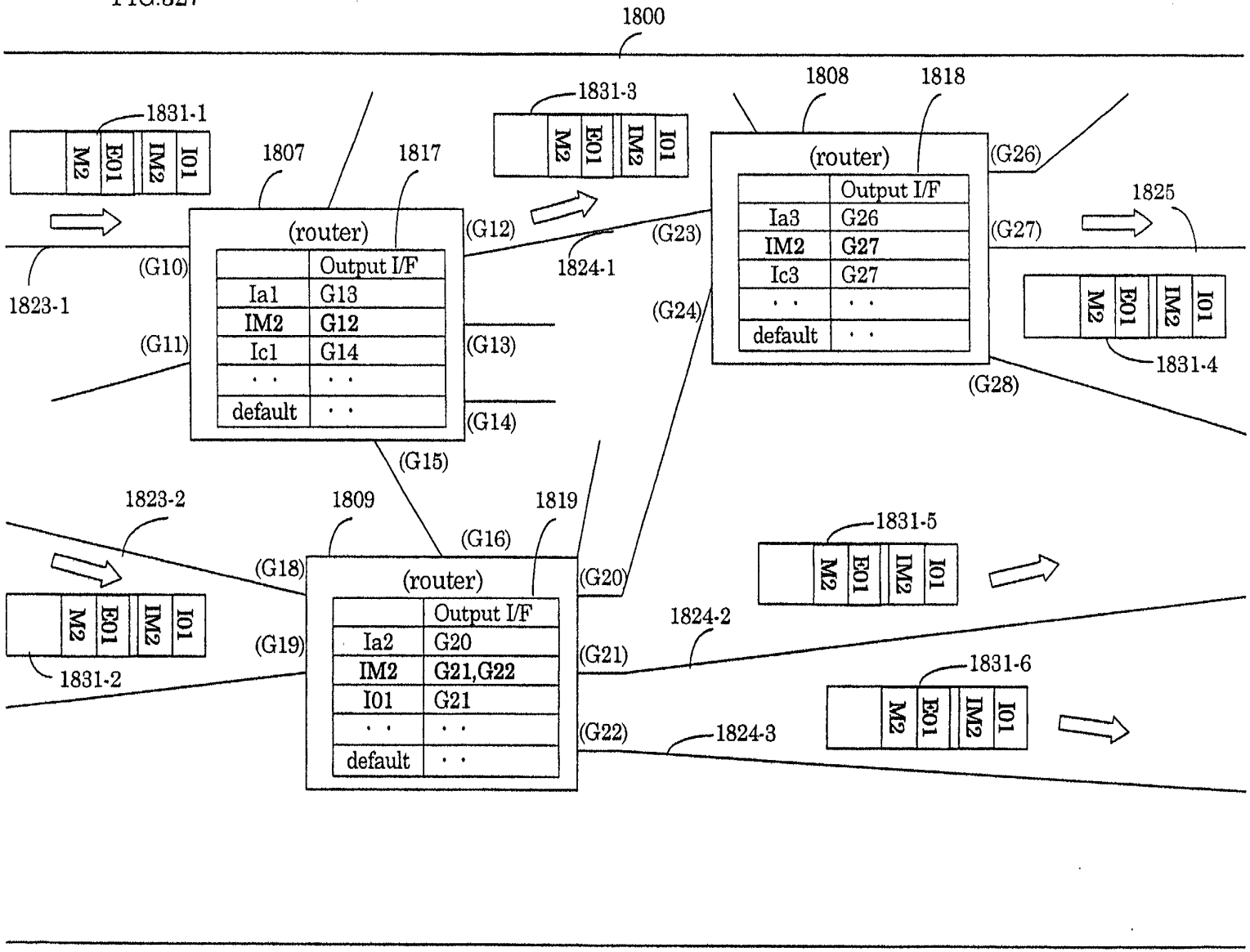
FIG.327



TO2280 '2922860

FIG.328

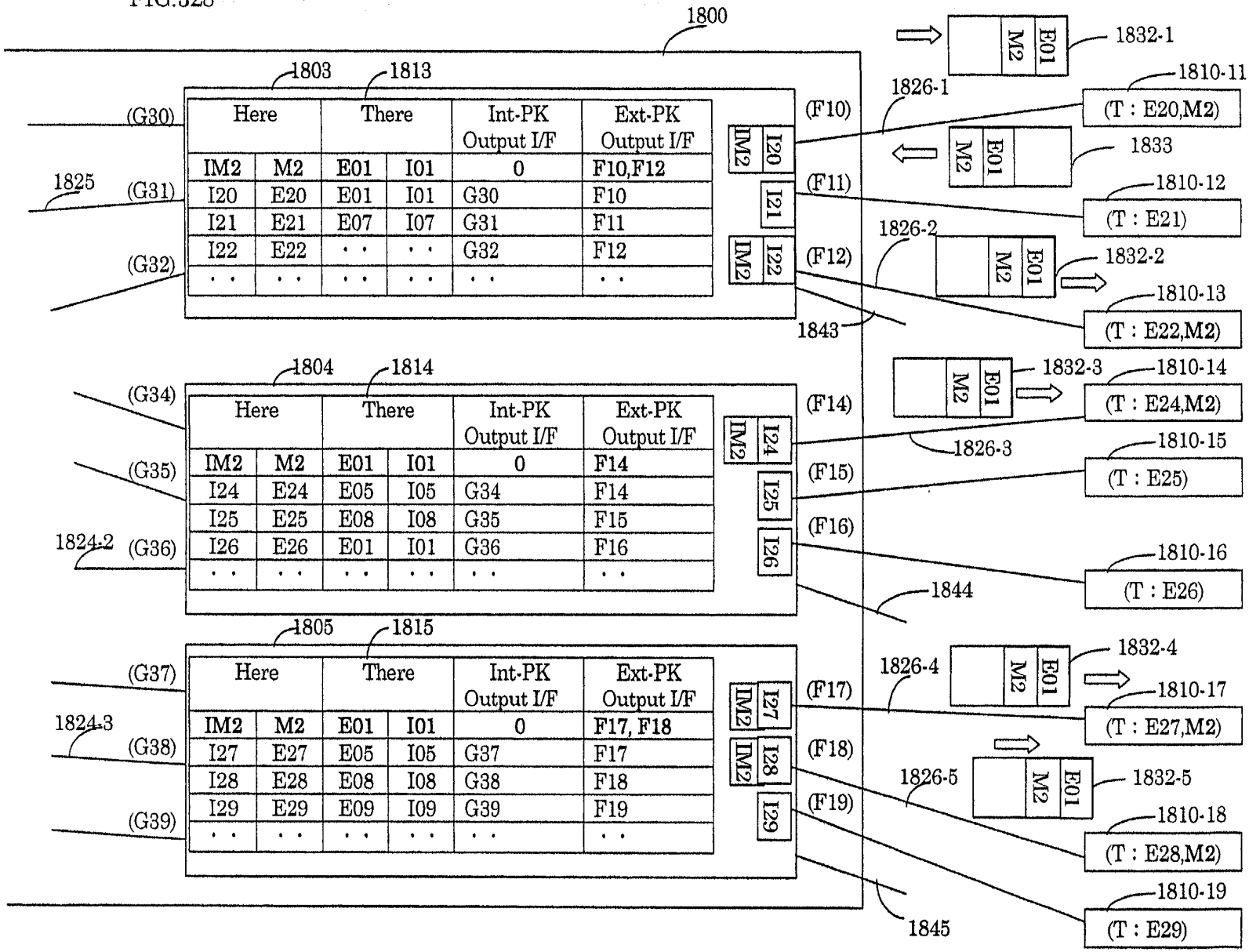
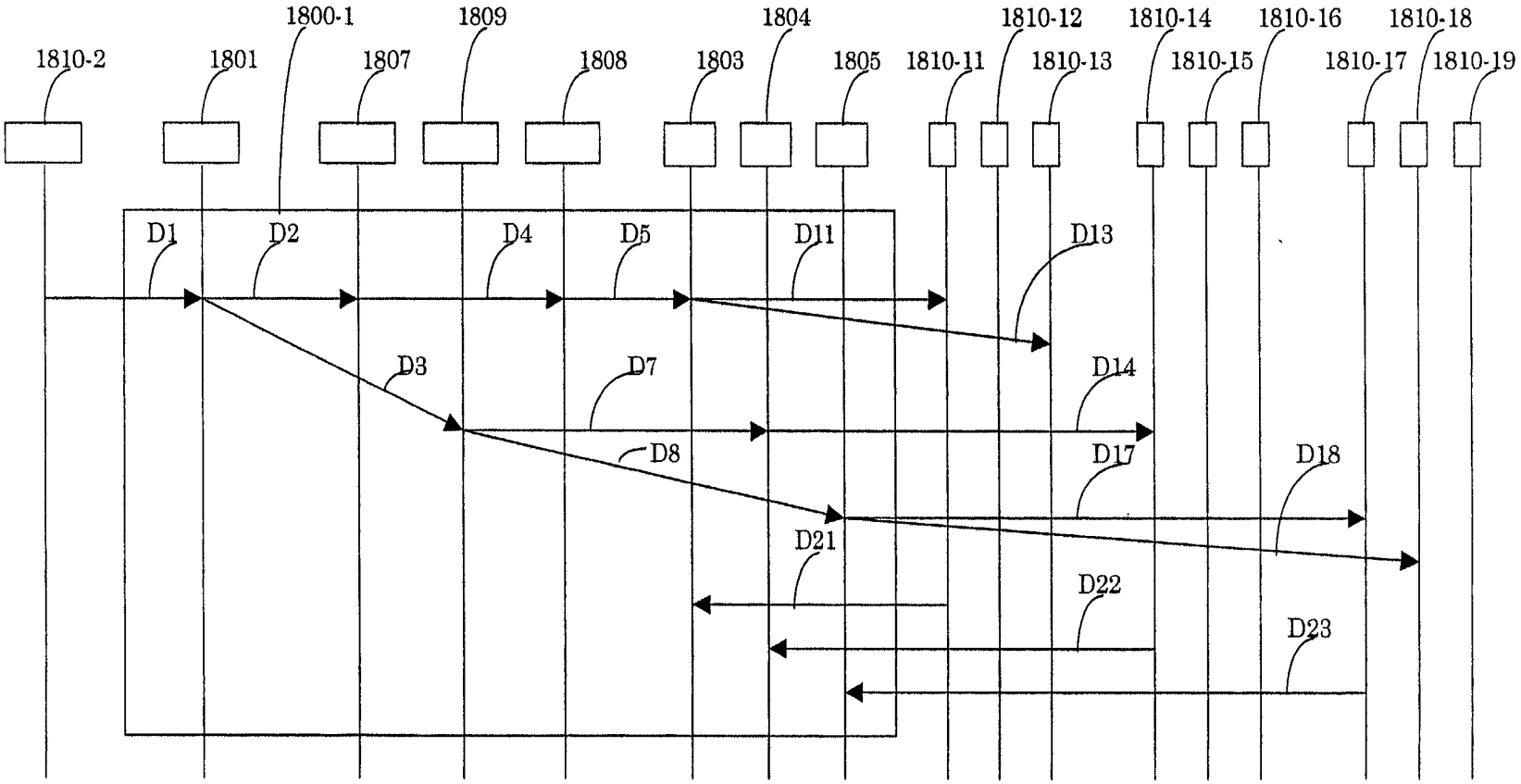


FIG.329


1800-1
1809
1804
1810-12
1810-14
1810-16
1810-18
1810-2
1801
1807
1808
1803
1805
1810-11
1810-13
1810-15
1810-17
1810-19
D1
D2
D4
D5
D11
D13
D3
D7
D14
D8
D17
D18
D21
D22
D23

JP 2012-252660 A 2012.12.20

FIG.330

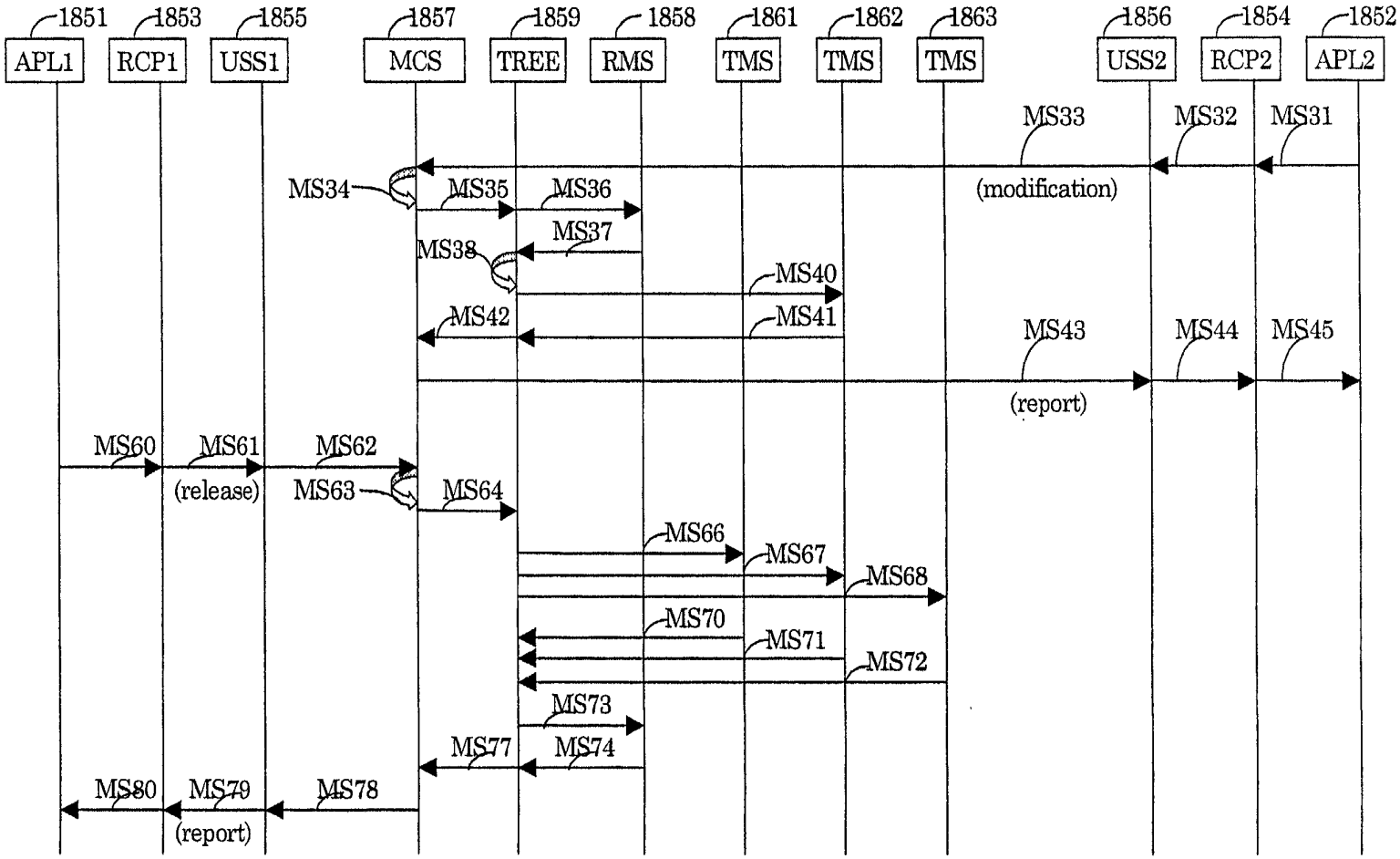


FIG.331

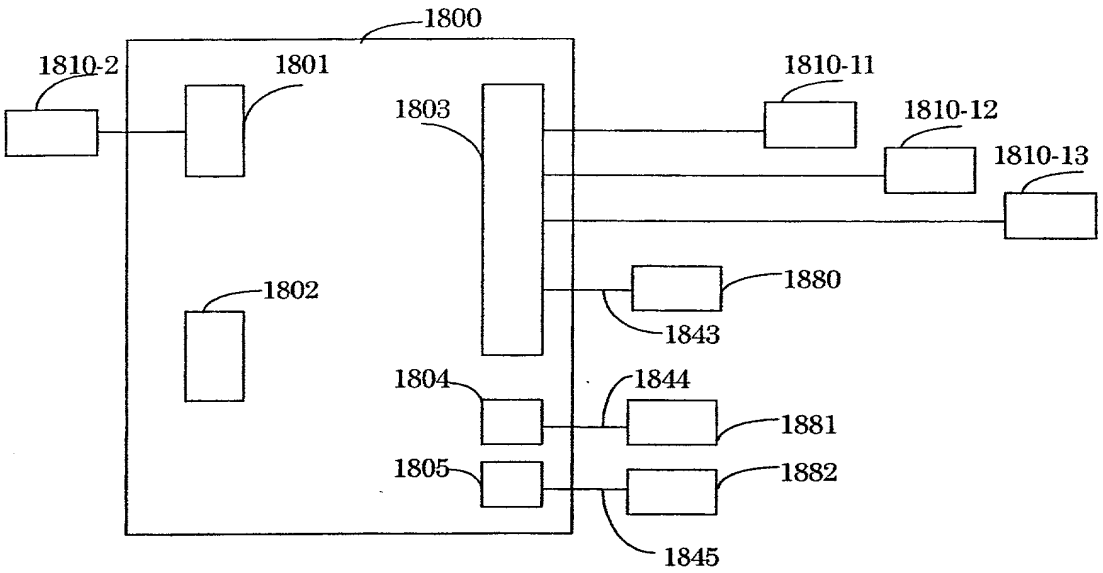


FIG.332

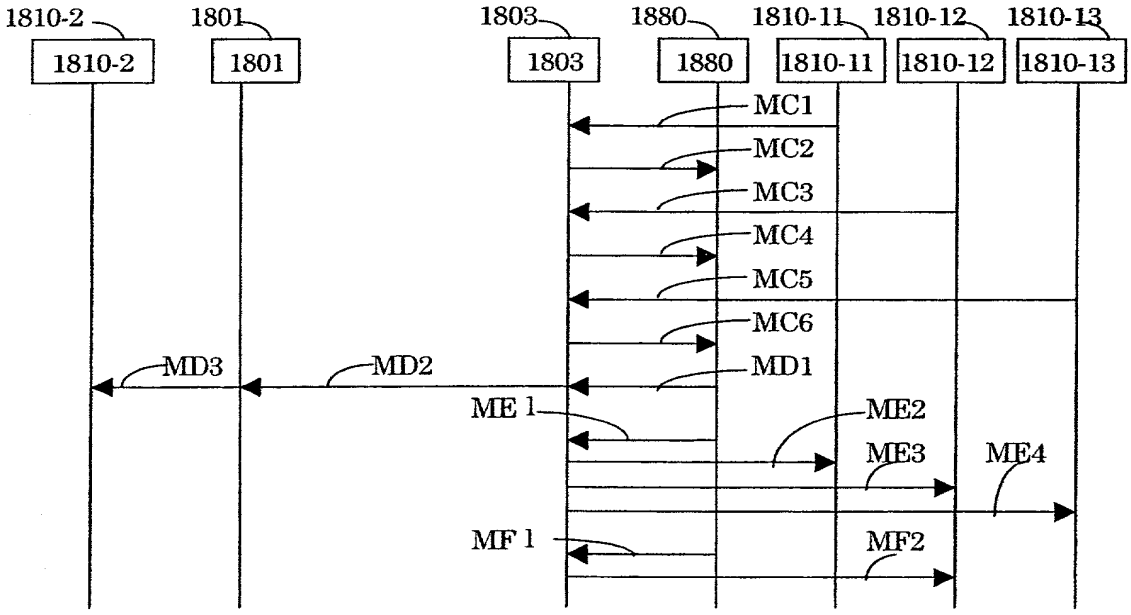


FIG.333

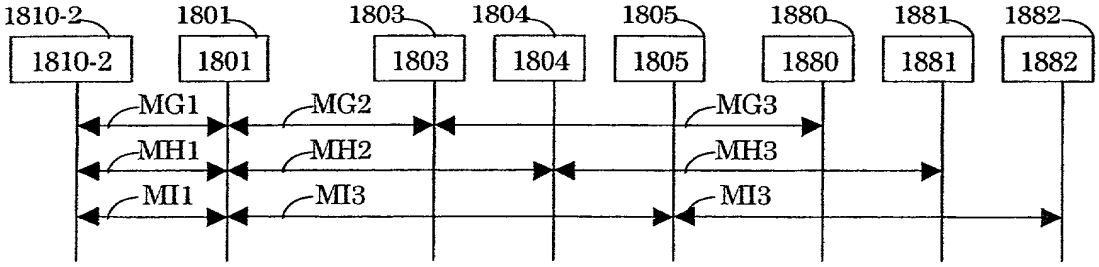


FIG.334

1811-5

Here	There		Int-PK Output I/F	Ext-PK Output I/F
I01	M2	IM2	G02,G03	0
I04	· ·	· ·	G01	F01
I01	E26	I26	G03	F02
I05	E27	I27	G03	F03
I01	E20	I20	G02	F02
I05	E24	I24	G03	F03
· ·	· ·	· ·	· ·	· ·

FIG.335

1811-6

Here			There			Int-PK Out I/F	Ext-PK Out I/F
I-adr	Mask	E-adr	Mask	E-adr	I-adr		
I01	M-h01	E01x	M-t2	M2x	IM2	G02,G03	0
I04	M-h04	E04x	· ·	· ·	· ·	G01	F01
I01	M-h01	E01x	M-t26	E26x	I26	G03	F02
I05	M-h05	E05x	M-t27	E27x	I28	G03	F03
I01	M-h01	E01x	M-t20	E20x	I20	· ·	· ·
I05	M-h05	E05x	M-t24	E24x	I24	· ·	· ·
· ·	· ·	· ·	· ·	· ·	· ·	· ·	· ·

FIG.336

1811-7

Here		There		Int-PK Output I/F	Ext-PK Output I/F
I01	E01	M2	IM2	MT-1	0
I04	E04	· ·	· ·	G01	F01
I01	E01	E26	I26	G03	F02
I05	E05	E27	I28	G03	F03
I01	E01	E20	I20	· ·	· ·
I05	E05	E24	I24	· ·	· ·
· ·	· ·	· ·	· ·	· ·	· ·

FIG.337

1811-8

MT-1	G02,G03
· ·	· ·

FIG.338

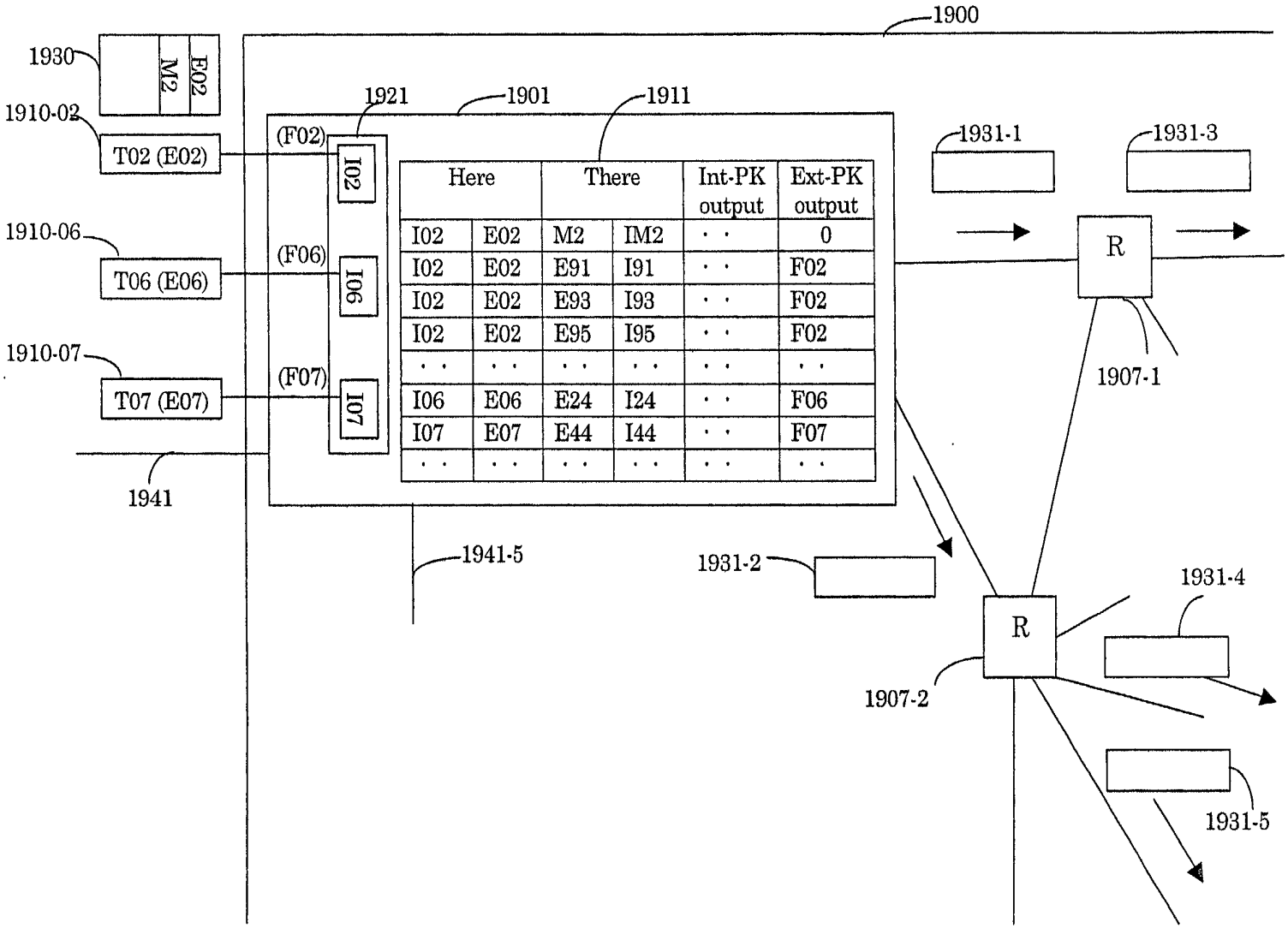
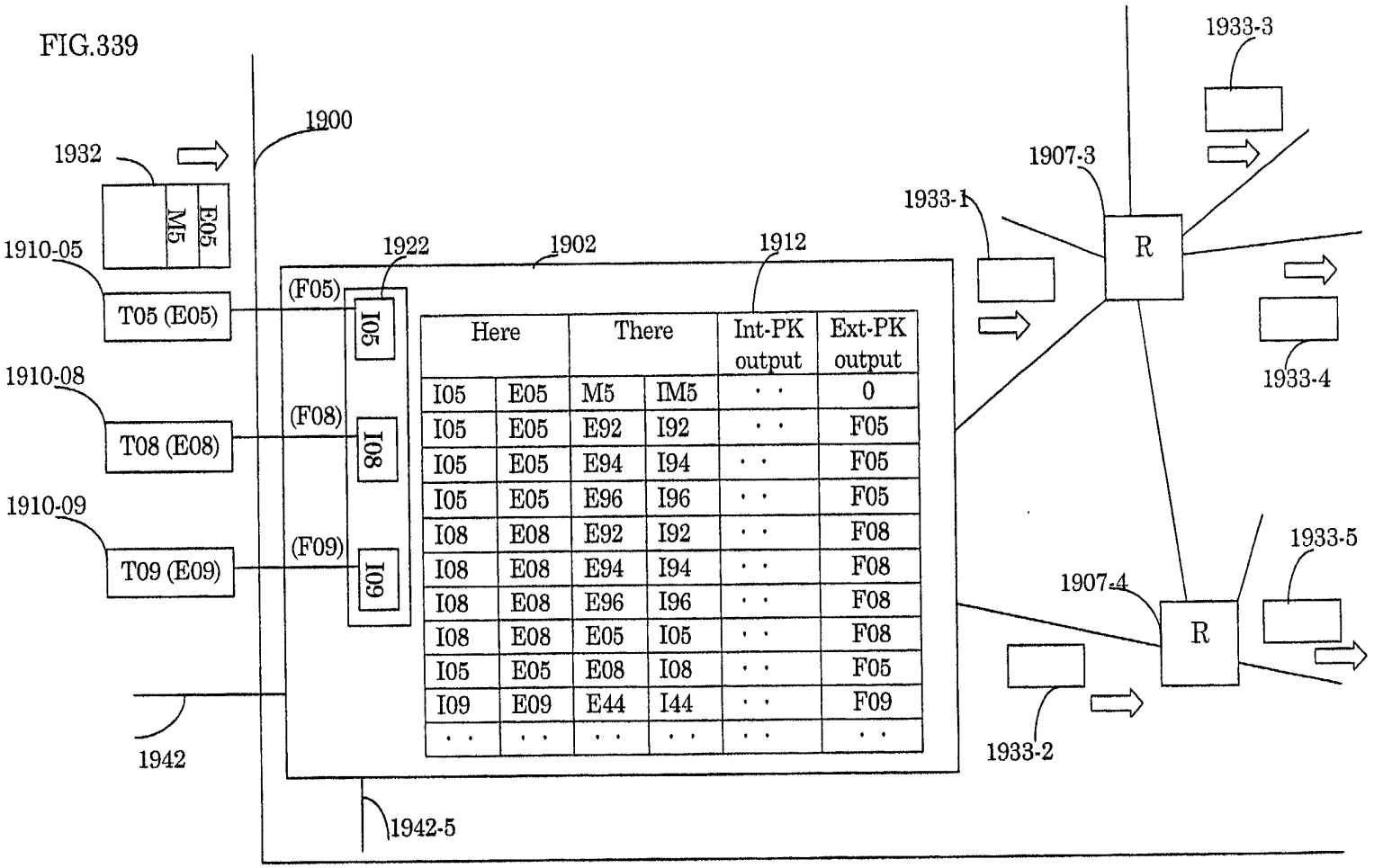

1900
1930
M2
E02
1910-02
T02 (E02)
1910-06
T06 (E06)
1910-07
T07 (E07)
1941
1921
1901
1911
(F02)
(F06)
(F07)
I02
I06
I07
Here
There
Int-PK output
Ext-PK output
I02 E02 M2 IM2 · · 0
I02 E02 E91 I91 · · F02
I02 E02 E93 I93 · · F02
I02 E02 E95 I95 · · F02
I06 E06 E24 I24 · · F06
I07 E07 E44 I44 · · F07
1941-5
1931-1
1931-3
R
1907-1
1931-2
1931-4
R
1907-2
1931-5

FIG.339



Here		There		Int-PK output	Ext-PK output
I05	E05	M5	IM5	· ·	0
I05	E05	E92	I92	· ·	F05
I05	E05	E94	I94	· ·	F05
I05	E05	E96	I96	· ·	F05
I08	E08	E92	I92	· ·	F08
I08	E08	E94	I94	· ·	F08
I08	E08	E96	I96	· ·	F08
I08	E08	E05	I05	· ·	F08
I05	E05	E08	I08	· ·	F05
I09	E09	E44	I44	· ·	F09
· ·	· ·	· ·	· ·	· ·	· ·

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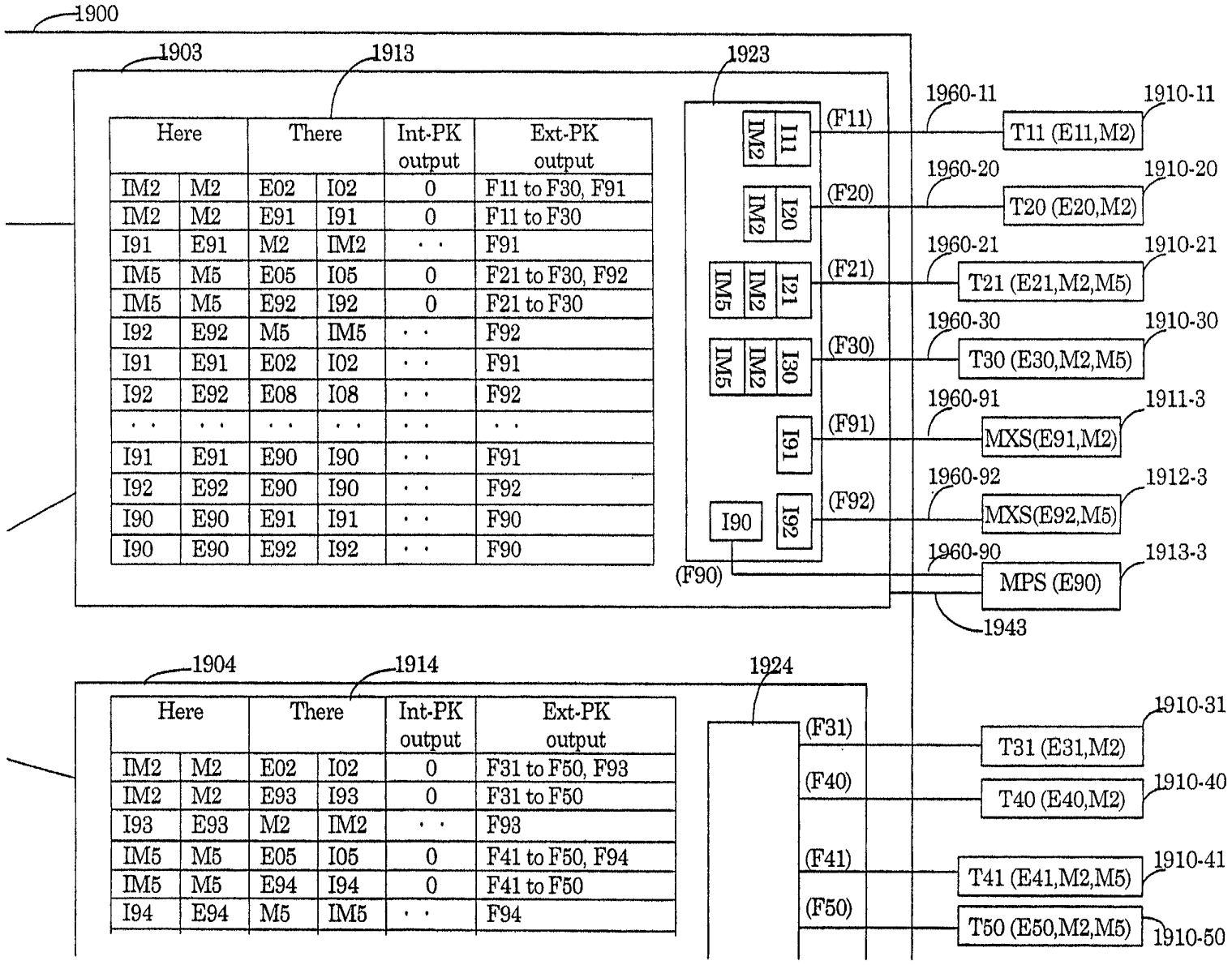
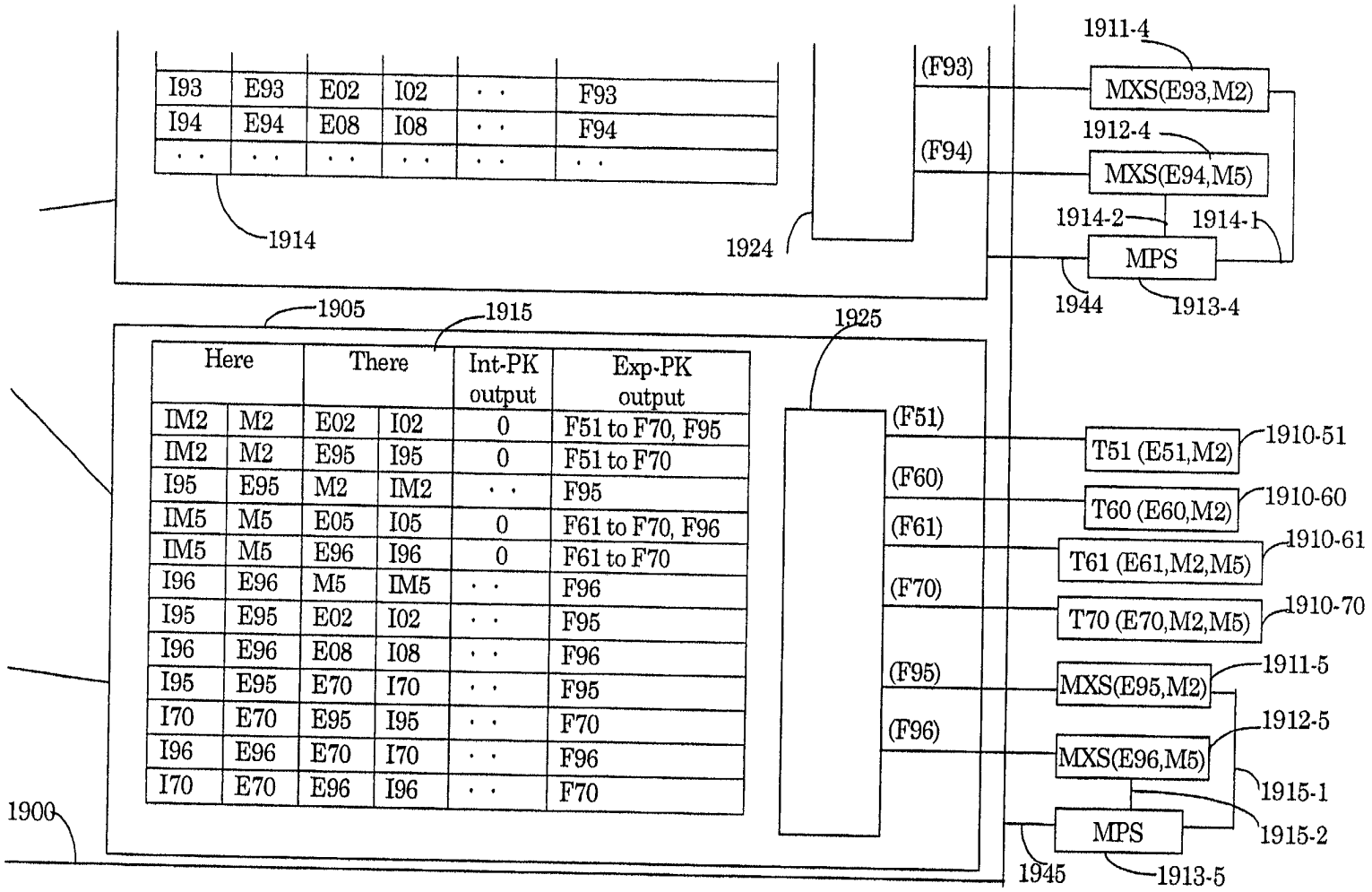
FIG.340



TO2360 "Z92Z360

FIG.341



I93	E93	E02	I02	· ·	F93
I94	E94	E08	I08	· ·	F94
· ·	· ·	· ·	· ·	· ·	· ·

Here		There		Int-PK output	Exp-PK output
IM2	M2	E02	I02	0	F51 to F70, F95
IM2	M2	E95	I95	0	F51 to F70
I95	E95	M2	IM2	· ·	F95
IM5	M5	E05	I05	0	F61 to F70, F96
IM5	M5	E96	I96	0	F61 to F70
I96	E96	M5	IM5	· ·	F96
I95	E95	E02	I02	· ·	F95
I96	E96	E08	I08	· ·	F96
I95	E95	E70	I70	· ·	F95
I70	E70	E95	I95	· ·	F70
I96	E96	E70	I70	· ·	F96
I70	E70	E96	I96	· ·	F70

FIG.342

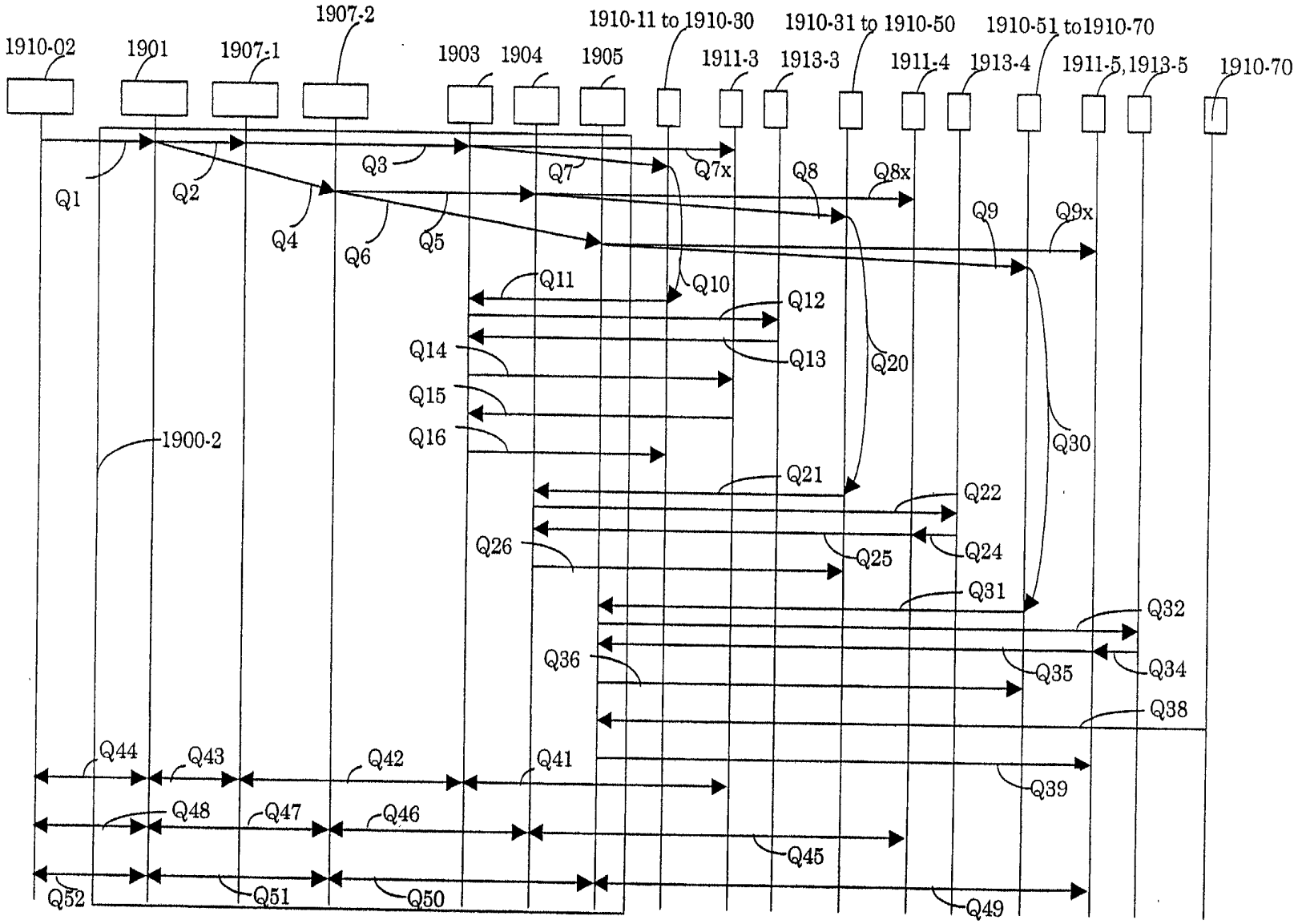

1910-02
1901
1907-1
1907-2
1903
1904
1905
1910-11 to 1910-30
1911-3
1913-3
1910-31 to 1910-50
1911-4
1913-4
1910-51 to1910-70
1911-5,1913-5
1910-70
Q1
Q2
Q3
Q4
Q6
Q5
Q7
Q7x
Q8
Q8x
Q9
Q9x
Q10
Q11
Q12
Q13
Q14
Q15
Q16
Q20
Q30
1900-2
Q21
Q22
Q24
Q25
Q26
Q31
Q32
Q34
Q35
Q36
Q38
Q39
Q41
Q42
Q43
Q44
Q45
Q46
Q47
Q48
Q49
Q50
Q51
Q52

FIG.343

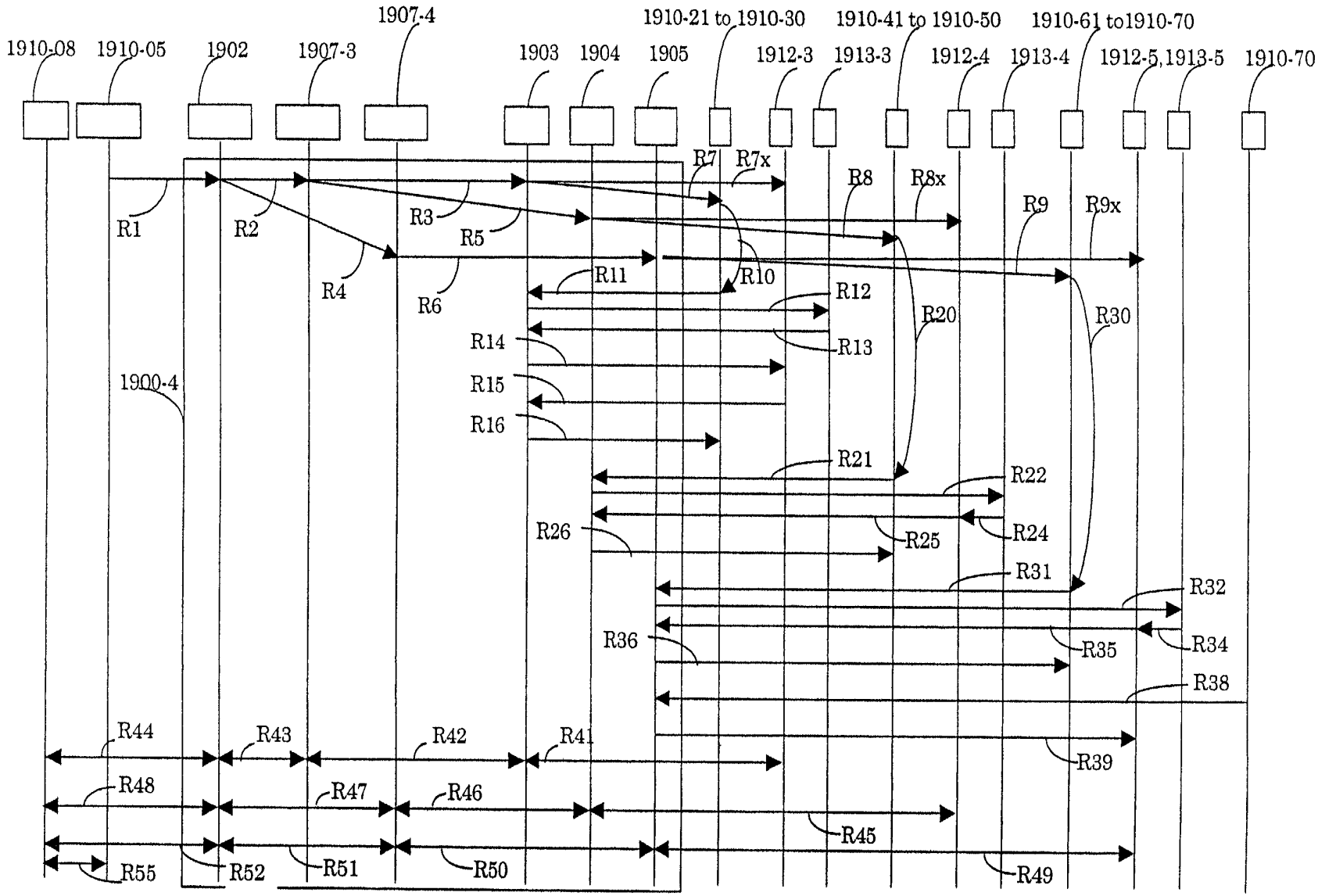

1910-08
1910-05
1902
1907-3
1907-4
1903
1904
1905
1910-21 to 1910-30
1912-3
1913-3
1910-41 to 1910-50
1912-4
1913-4
1910-61 to1910-70
1912-5,1913-5
1910-70
1900-4
R1
R2
R3
R4
R5
R6
R7
R7x
R8
R8x
R9
R9x
R10
R11
R12
R13
R14
R15
R16
R20
R21
R22
R24
R25
R26
R30
R31
R32
R34
R35
R36
R38
R39
R41
R42
R43
R44
R45
R46
R47
R48
R49
R50
R51
R52
R55

FIG.344

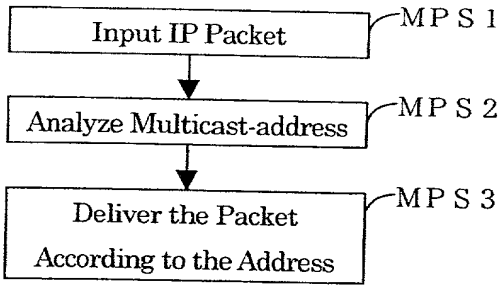


FIG.345

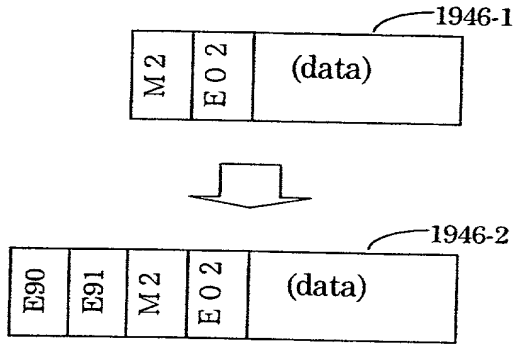


FIG.346

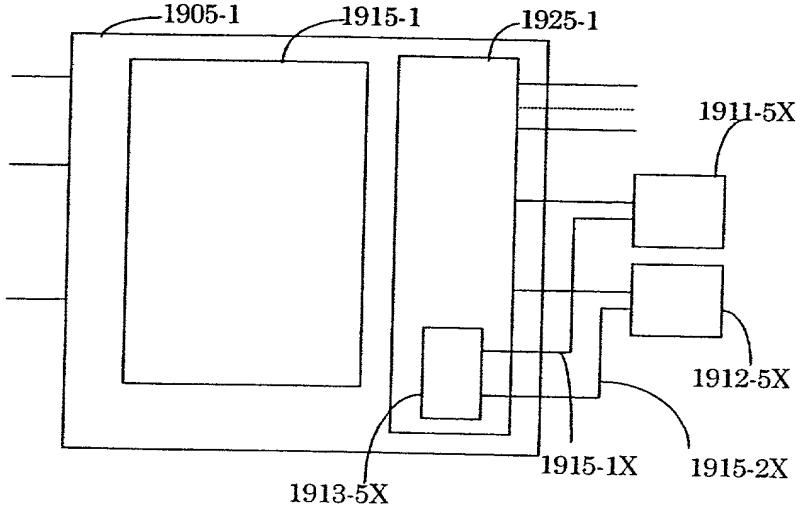


FIG.347

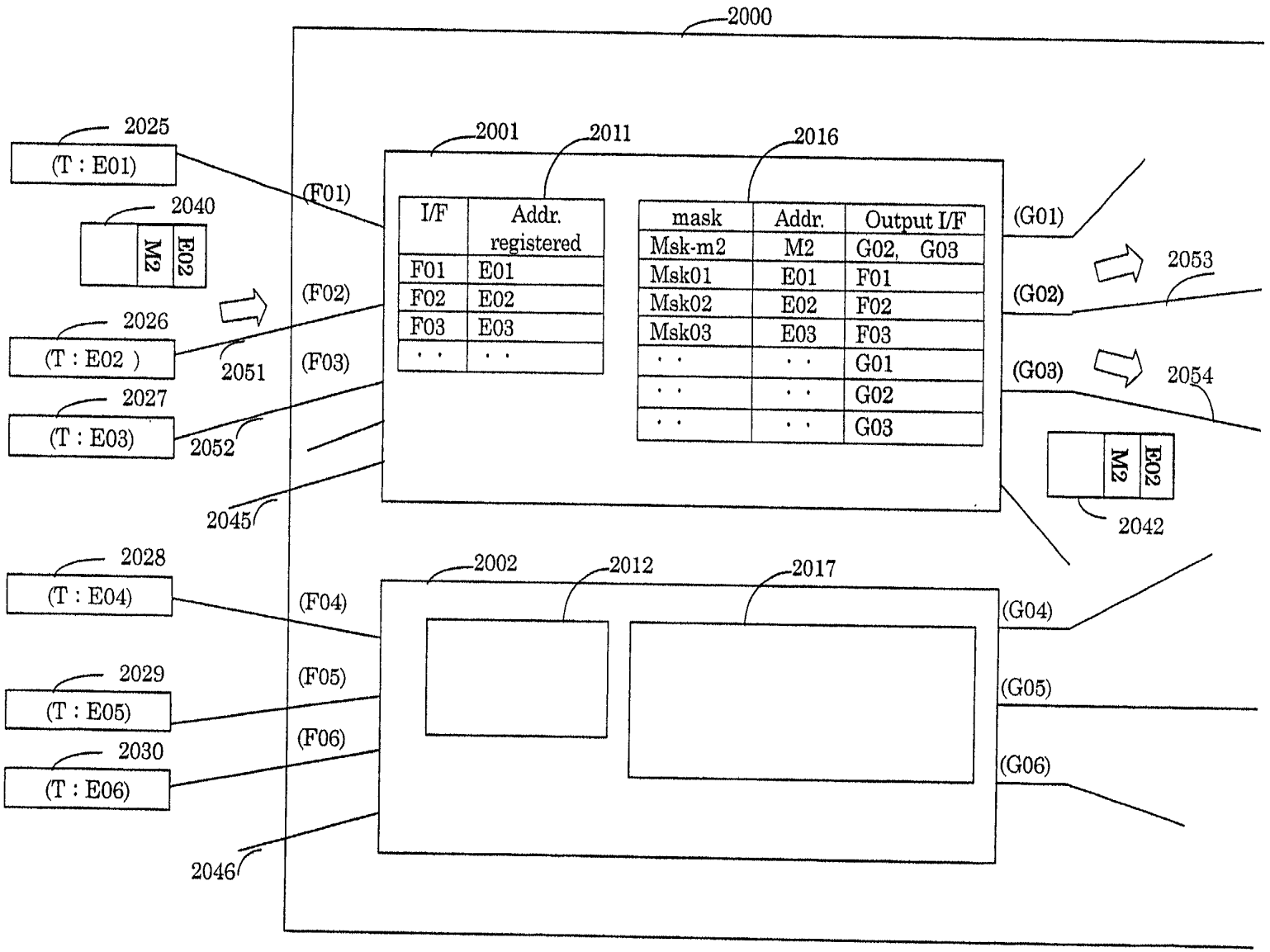

2000
2025
(T : E01)
2040
M2
E02
2026
(T : E02)
2027
(T : E03)
2028
(T : E04)
2029
(T : E05)
2030
(T : E06)
(F01)
(F02)
(F03)
(F04)
(F05)
(F06)
2051
2052
2045
2046
2001
2011
2016
I/F
Addr. registered
F01 E01
F02 E02
F03 E03
mask
Addr.
Output I/F
Msk-m2 M2 G02, G03
Msk01 E01 F01
Msk02 E02 F02
Msk03 E03 F03
G01
G02
G03
(G01)
(G02)
(G03)
2053
2054
2042
2002
2012
2017
(G04)
(G05)
(G06)

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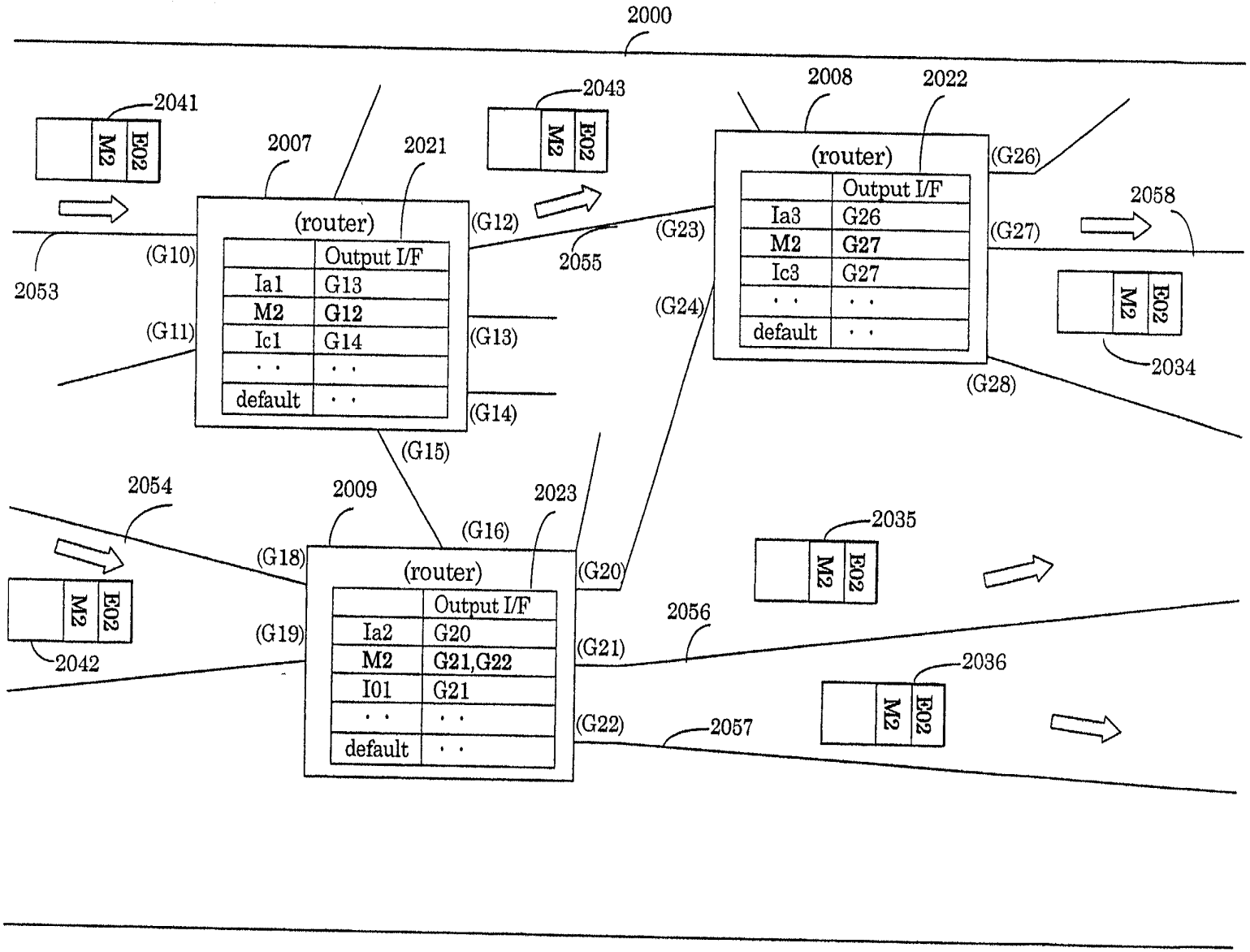
FIG.348



TOZ280 '2927260

FIG.349

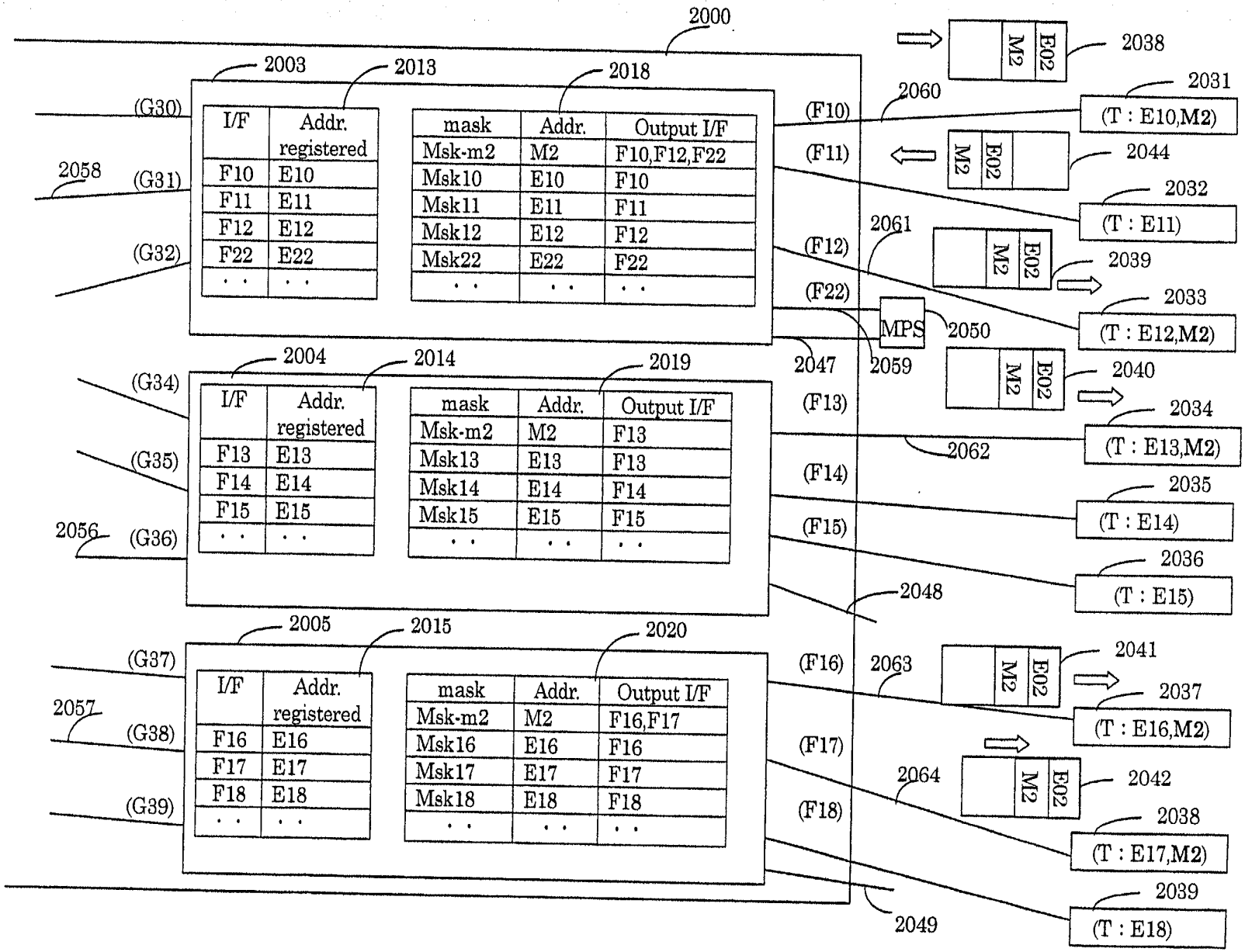


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FIG.350

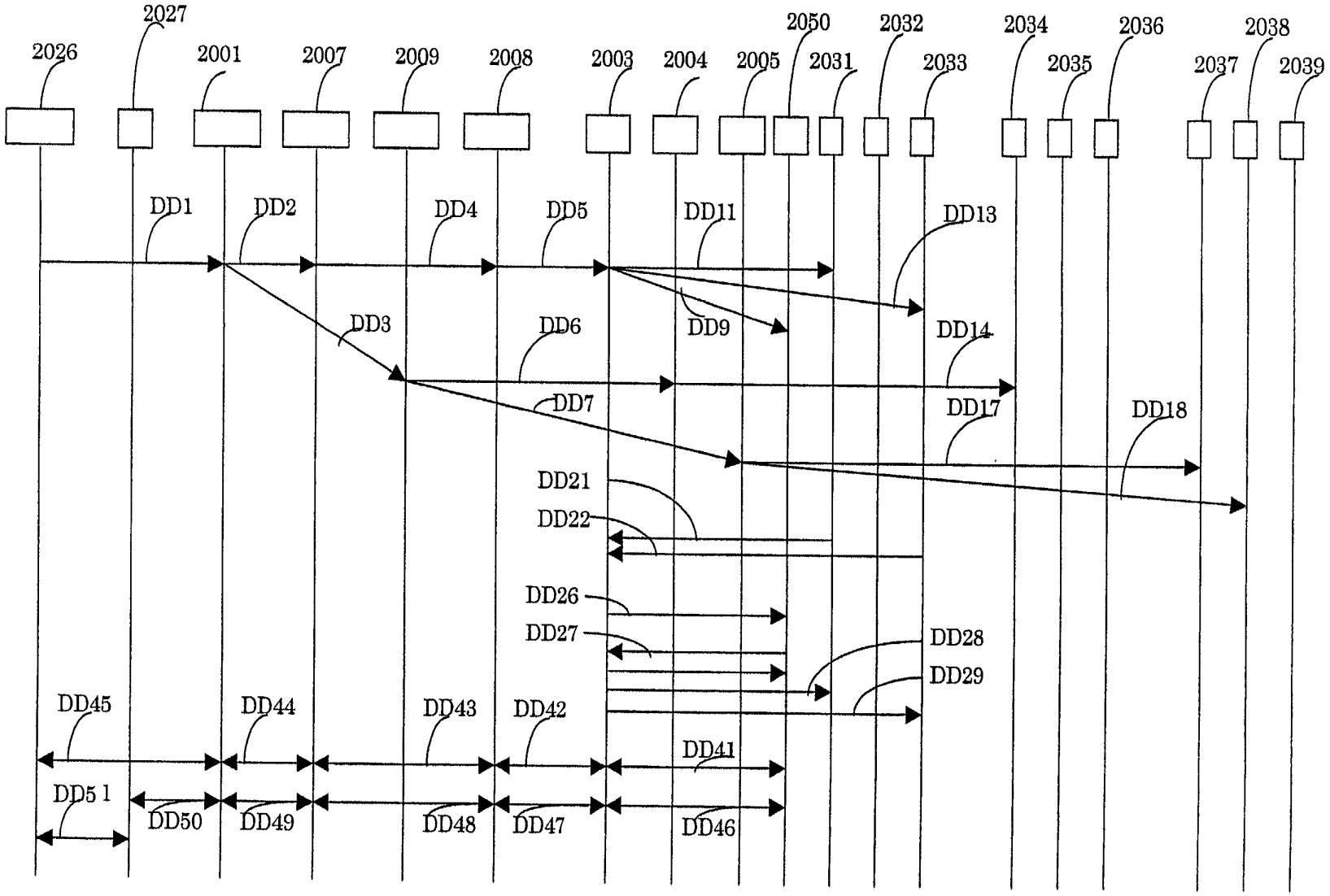

FIG.351

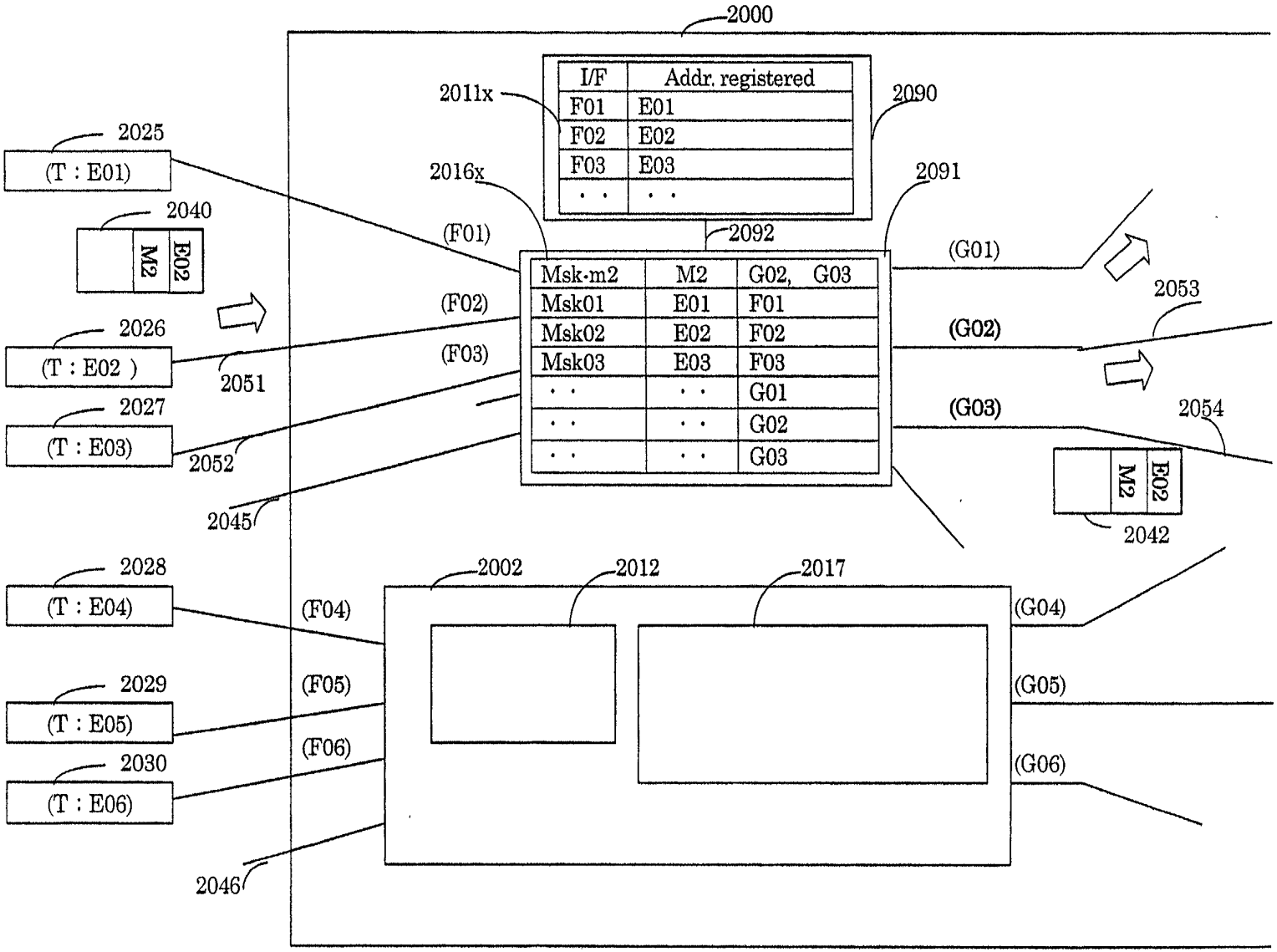
2000
2011x
2090
I/F
Addr. registered
F01
E01
F02
E02
F03
E03
2025
(T : E01)
2016x
2091
2040
M2
E02
(F01)
2092
(G01)
2053
(F02)
(G02)
2026
(T : E02)
2051
(F03)
Msk-m2
M2
G02, G03
Msk01
E01
F01
Msk02
E02
F02
Msk03
E03
F03
G01
G02
G03
2027
(T : E03)
(G03)
2054
2052
M2
E02
2045
2042
2028
(T : E04)
2002
2012
2017
(F04)
(G04)
2029
(T : E05)
(F05)
(G05)
(F06)
2030
(T : E06)
(G06)
2046

FIG.352

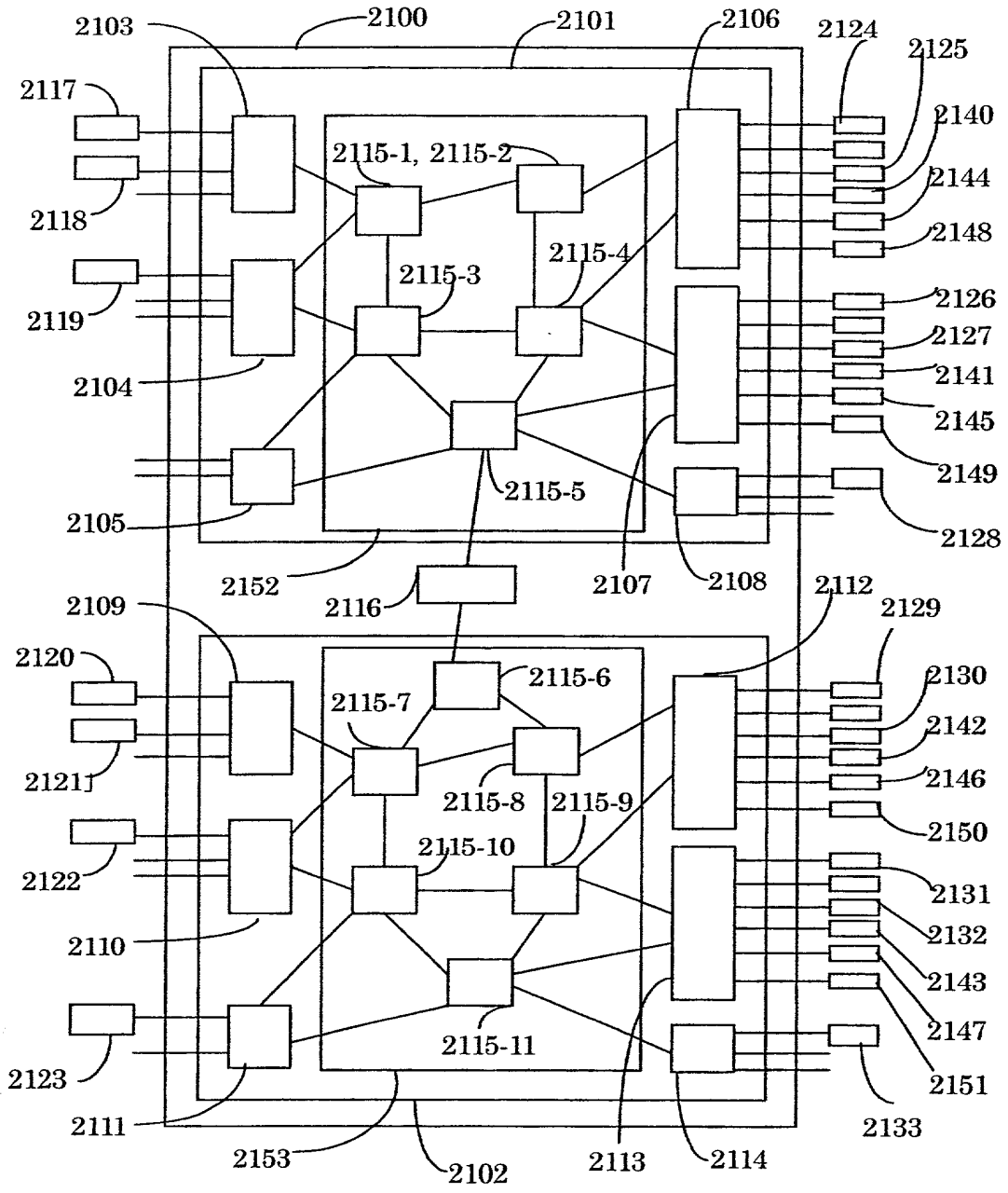
2103
2100
2101
2106
2124
2125
2117
2140
2115-1, 2115-2
2144
2118
2148
2115-4
2115-3
2126
2119
2127
2104
2141
2145
2149
2115-5
2105
2128
2152
2116
2107
2108
2112
2109
2129
2120
2115-6
2130
2115-7
2142
2121
2115-8
2115-9
2146
2150
2122
2115-10
2131
2110
2132
2143
2147
2115-11
2123
2151
2111
2133
2153
2102
2113
2114

FIG.353

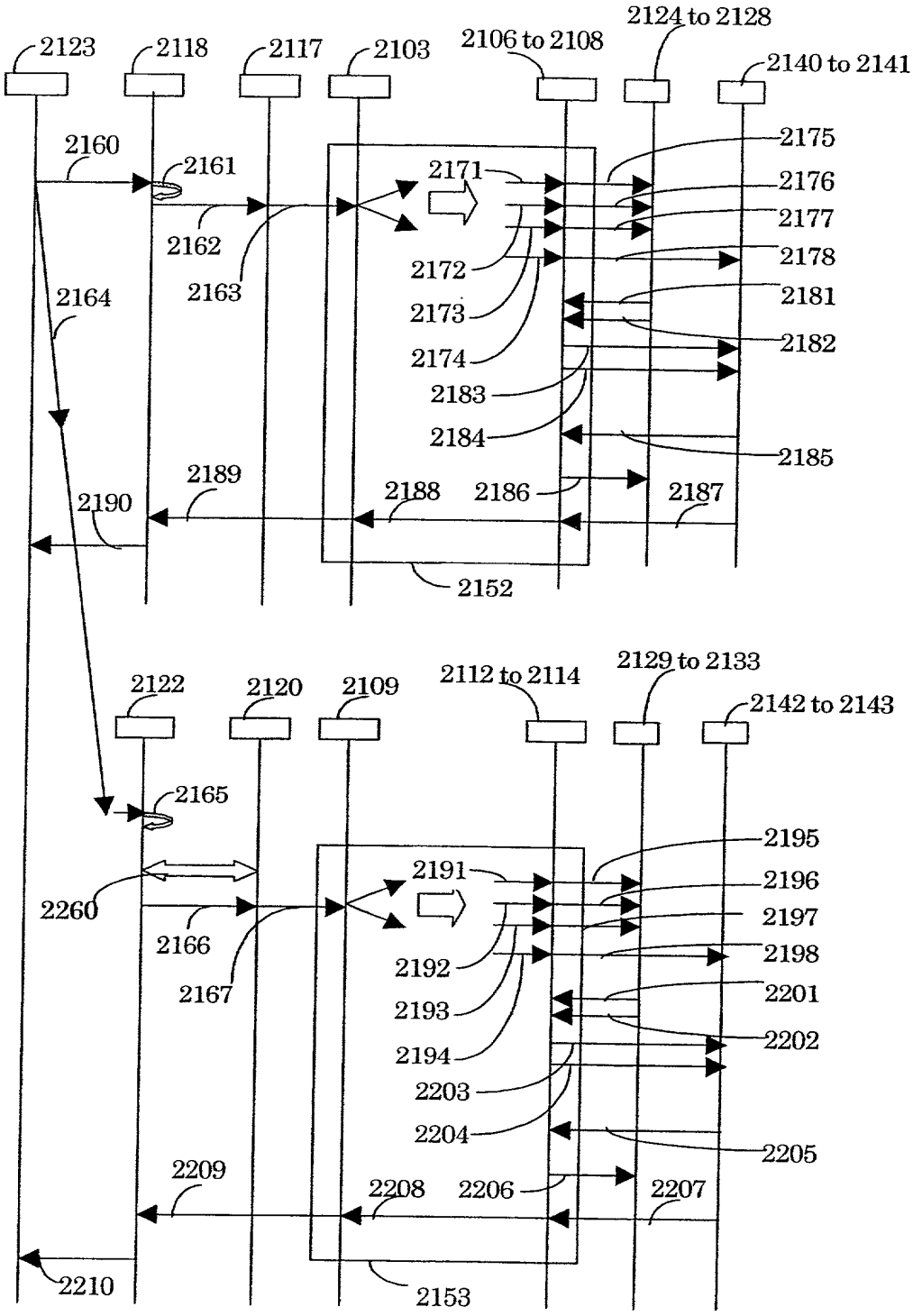
2123
2118
2117
2103
2106 to 2108
2124 to 2128
2140 to 2141
2160
2161
2162
2163
2164
2171
2172
2173
2174
2175
2176
2177
2178
2181
2182
2183
2184
2185
2186
2187
2188
2189
2190
2152
2122
2120
2109
2112 to 2114
2129 to 2133
2142 to 2143
2165
2260
2166
2167
2191
2192
2193
2194
2195
2196
2197
2198
2201
2202
2203
2204
2205
2206
2207
2208
2209
2210
2153

FIG.354

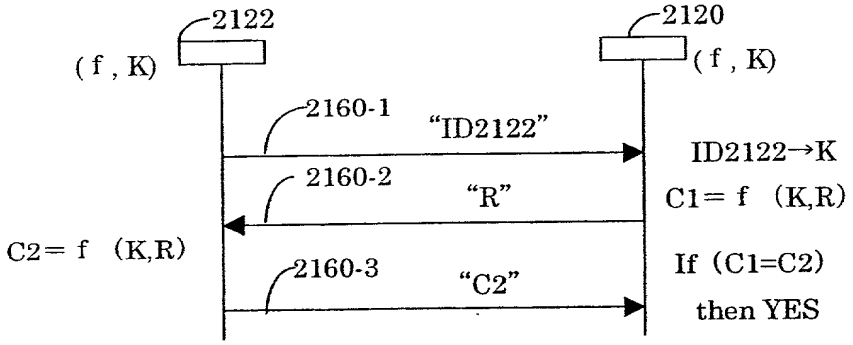
2122
(f, K)
2120
(f, K)
2160-1
"ID2122"
ID2122→K
2160-2
"R"
C1= f (K,R)
C2= f (K,R)
2160-3
"C2"
If (C1=C2)
then YES

FIG.355

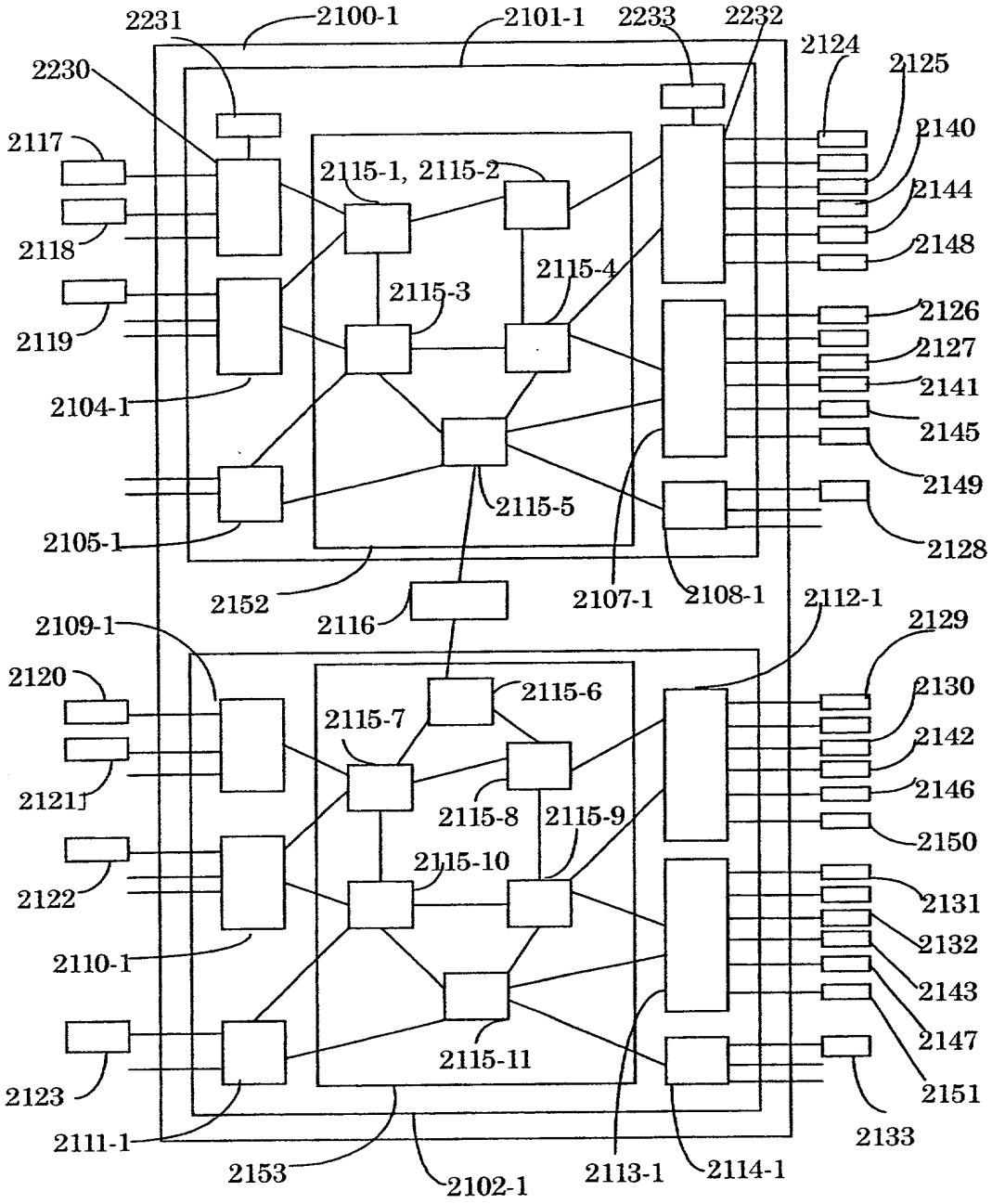
2231
2100-1
2101-1
2233
2232
2124
2125
2230
2140
2117
2115-1, 2115-2
2144
2118
2148
2115-4
2115-3
2126
2119
2127
2141
2104-1
2145
2149
2115-5
2105-1
2128
2152
2116
2107-1
2108-1
2112-1
2109-1
2129
2120
2115-6
2130
2115-7
2142
2121
2146
2115-8
2115-9
2150
2115-10
2122
2131
2132
2110-1
2143
2147
2115-11
2123
2151
2133
2111-1
2153
2102-1
2113-1
2114-1

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FIG.356

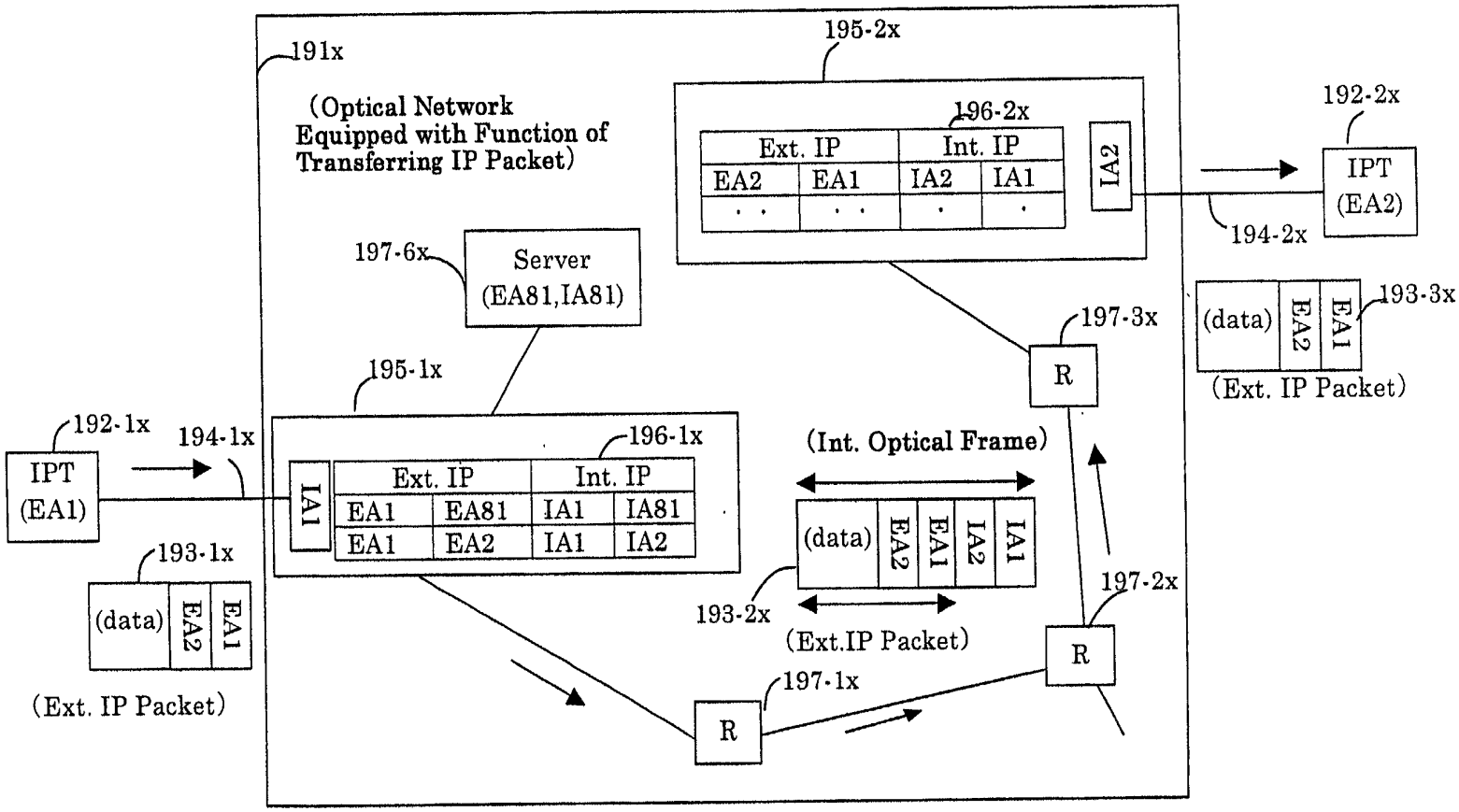

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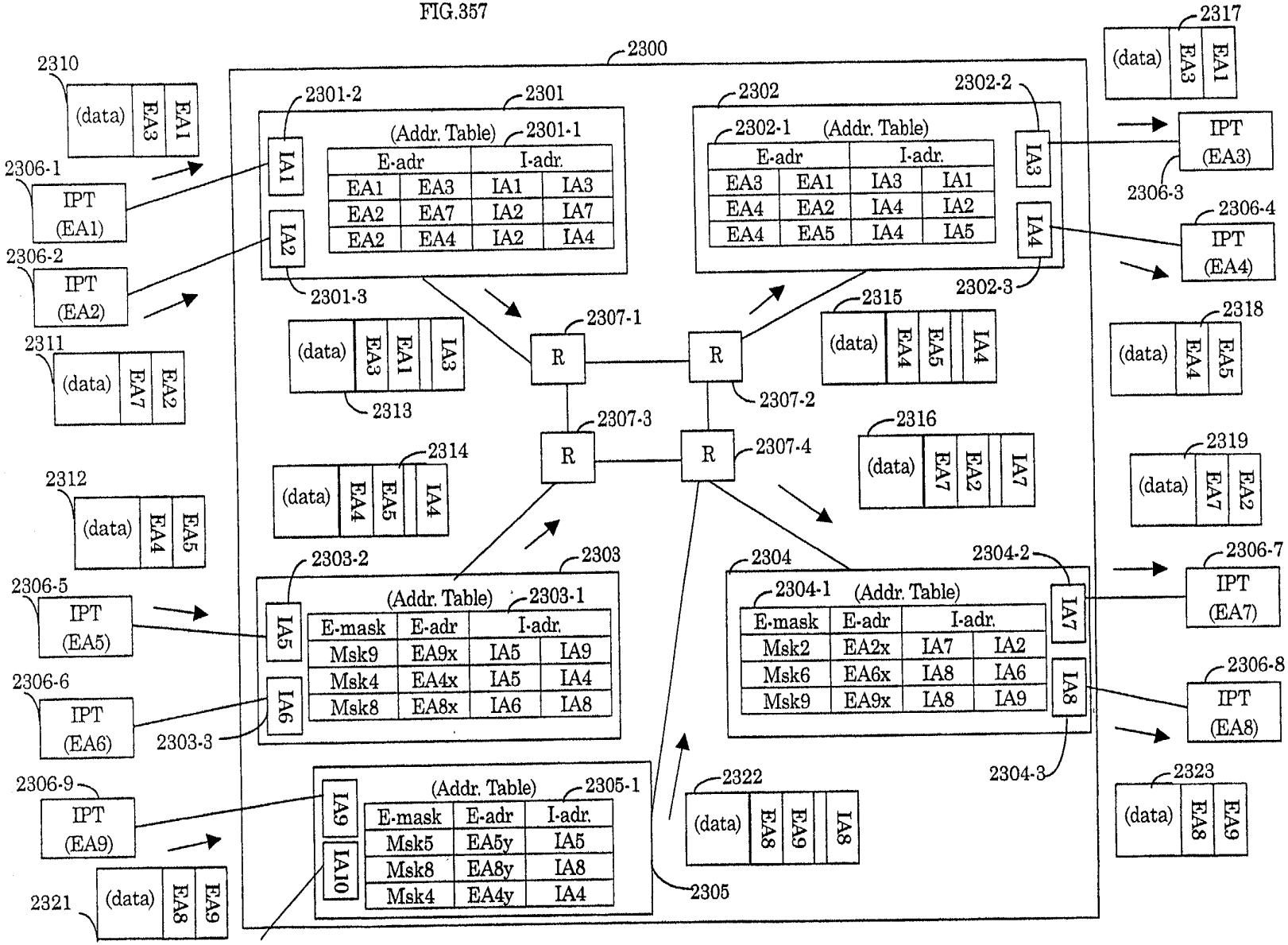
FIG.357



GIG.358

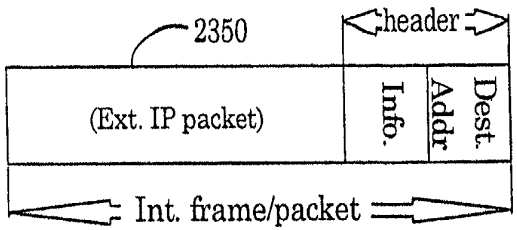


FIG.359

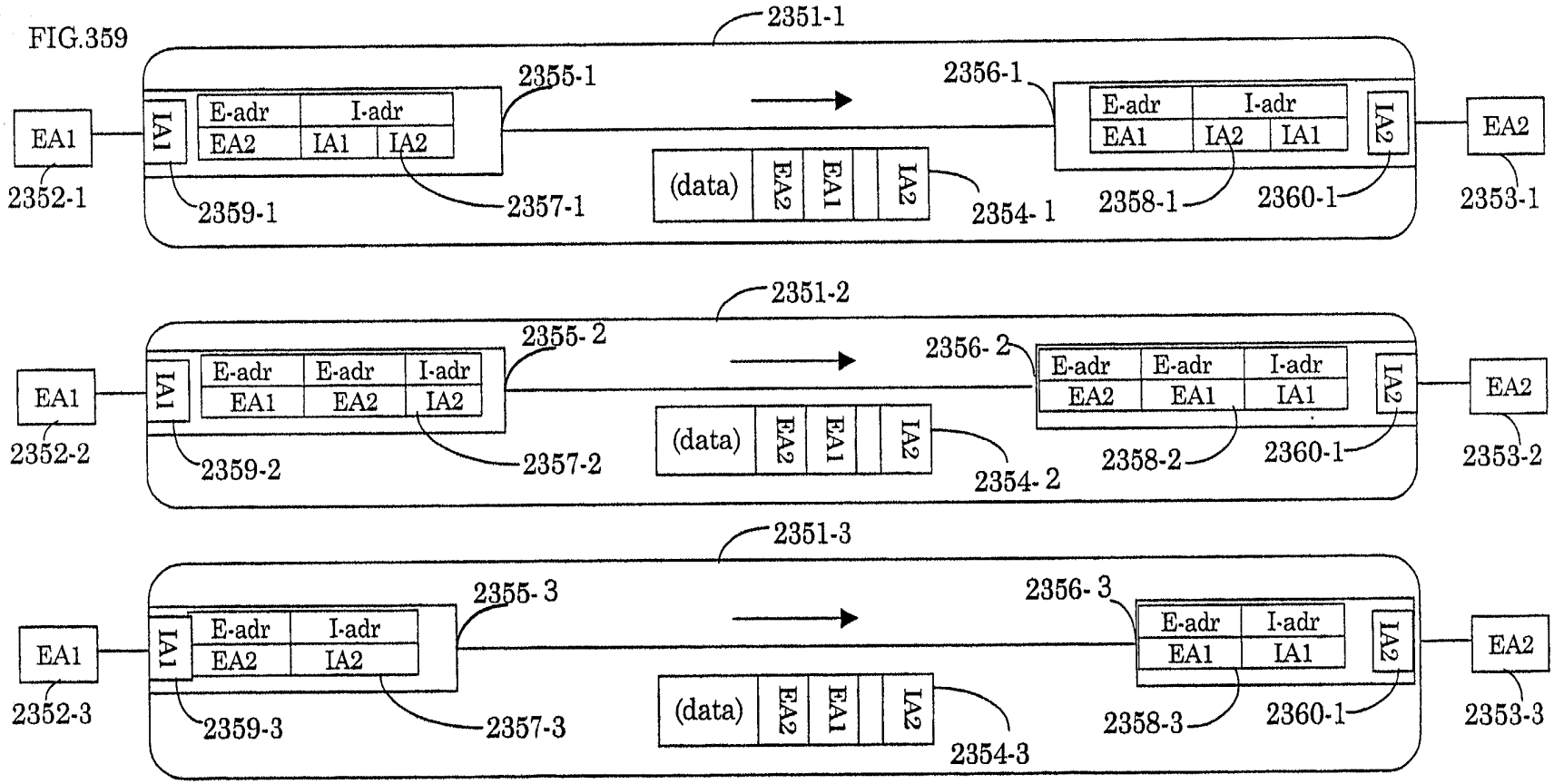
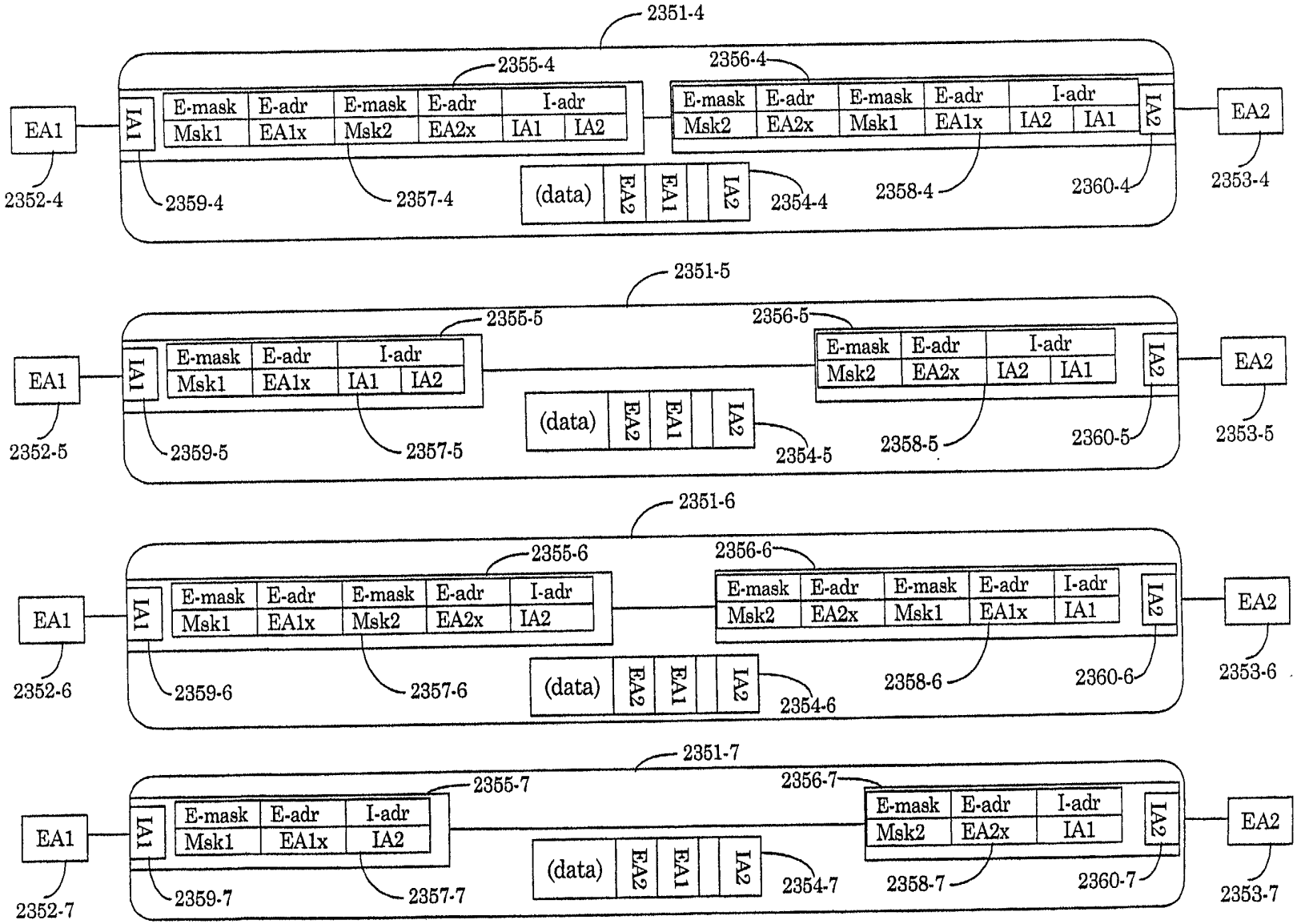


FIG.360


2351-4
2355-4
2356-4
EA1
IA1
E-mask
E-adr
E-mask
E-adr
I-adr
Msk1
EA1x
Msk2
EA2x
IA1
IA2
E-mask
E-adr
E-mask
E-adr
I-adr
Msk2
EA2x
Msk1
EA1x
IA2
IA1
IA2
EA2
2352-4
2359-4
2357-4
(data)
EA2
EA1
IA2
2354-4
2358-4
2360-4
2353-4
2351-5
2355-5
2356-5
EA1
IA1
E-mask
E-adr
I-adr
Msk1
EA1x
IA1
IA2
E-mask
E-adr
I-adr
Msk2
EA2x
IA2
IA1
IA2
EA2
2352-5
2359-5
2357-5
(data)
EA2
EA1
IA2
2354-5
2358-5
2360-5
2353-5
2351-6
2355-6
2356-6
EA1
IA1
E-mask
E-adr
E-mask
E-adr
I-adr
Msk1
EA1x
Msk2
EA2x
IA2
E-mask
E-adr
E-mask
E-adr
I-adr
Msk2
EA2x
Msk1
EA1x
IA1
IA2
EA2
2352-6
2359-6
2357-6
(data)
EA2
EA1
IA2
2354-6
2358-6
2360-6
2353-6
2351-7
2355-7
2356-7
EA1
IA1
E-mask
E-adr
I-adr
Msk1
EA1x
IA2
E-mask
E-adr
I-adr
Msk2
EA2x
IA1
IA2
EA2
2352-7
2359-7
2357-7
(data)
EA2
EA1
IA2
2354-7
2358-7
2360-7
2353-7